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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT—INDEPENDENT AGENCIES APPROPRIATIONS FOR 1987

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON HUD—INDEPENDENT AGENCIES

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT—INDEPENDENT AGENCIES APPROPRIATIONS FOR 1987

TUESDAY, MARCH 18, 1986.

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

WITNESSES

ALAN HILL, CHAIRMAN
WILLIAM MILLS, MEMBER
JACQUELINE SCHAFER, MEMBER
DINAH BEAR, GENERAL COUNSEL
KEMP HARSHMAN, DEPUTY GENERAL COUNSEL

Mr. STOKES. Good morning. The Committee will come to order. First, let me welcome all the witnesses here this morning.

CEQ is one of the few agencies under this Committee's jurisdiction which enjoys an increase in 1987. The request is up $150,000 from $670,000 to $820,000. The corresponding increase in personnel is from 9.5 to 13 FTE.

Chairman Hill, we are pleased to have you here with us this morning. You may proceed however you like.

OPENING STATEMENT

Mr. HILL. Thank you. I have a brief statement I would ask be included in the record.

I will make it even briefer by saying, first, it is a pleasure for us to be here. I would like to introduce on my left my two colleagues, Members of the Council in order of seniority, Dr. William Mills, and Ms. Jackee Schafer. On my right, Miss Dinah Bear, our General Counsel, and Kemp Harshman, Deputy General Counsel, and I would also like to praise Kemp in the preparation of the budget narrative this year. He oversaw that process.

I think it is one that is the best products we have brought before you. As you know, the President requested $820,000 for CEQ. This level of funding recognizes the resources needed to support an authorized personnel ceiling of 13 full time equivalents. Although this is a significant increase in funding for CEQ and OEQ, the request is within the deficit reduction plan which was established for the Executive Office of the President in the overall.

The additional funding will be used to hire additional technical and scientific staff members, specifically a science advisor and environmental data and monitoring specialist, NEPA specialist and a support staff position.

With that, let me end the opening comments and I will be happy to answer your questions.

[The statement of Mr. Hill follows:]

STATEMENT OF A. ALAN HILL
CHAIRMAN, COUNCIL ON ENVIRONMENTAL QUALITY
DIRECTOR, OFFICE OF ENVIRONMENTAL QUALITY
BEFORE THE
SUBCOMMITTEE ON APPROPRIATIONS FOR HUD & INDEPENDENT AGENCIES
HOUSE COMMITTEE ON APPROPRIATIONS
MARCH 18, 1986

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you today and thank you for the opportunity to discuss with you the President's budget request to support the activities of the Council on Environmental Quality and the Office of Environmental Quality for fiscal year 1987. With me this morning are the other two Members of the Council -- Dr. William Mills and Miss Jacqueline E. Schafer. In addition, I would like to introduce Miss Dinah Bear, General Counsel; and Mr. Kemp Harshman, Deputy General Counsel.

The President has requested an appropriation of $820,000 for CEQ for fiscal year 1987. This level of funding recognizes the resources needed to support an authorized personnel ceiling of 13 full time equivalents (FTES). The proposed budget will enable the agency to fulfill its statutory objectives in a cost-effective manner.

Although this is a significant increase in funding for CEQ/OEQ, the request is within deficit reduction planning limits established for the Executive Office of the President as a whole.

The additional FY 87 funding will be used primarily for hiring additional technical and scientific staff members. The four new positions to be created include a Science Advisor, an environmental data and monitoring technician, a NEPA specialist to assist the General Counsel, and a support staff position to provide editorial services for the annual Environmental Quality Report and clerical assistance with agency administrative functions.

The Council/Office has also taken two personnel actions in FY 86 in order to more effectively utilize its existing resources. First, the agency abolished the administrative position of its half time Executive Officer and assigned the incumbent to work full time as the Deputy General Counsel. Second, the agency Administrative Officer has been detailed to another agency on a reimbursable basis for the remainder of the current fiscal year. That position will be abolished at the end of FY 86.

As you can see, the agency is undergoing a major reorganization of its personnel resources. These changes are required for the Council and the Office to fulfill their statutory responsibilities under NEPA, 14 other federal laws, two treaties, and three Executive Orders. The increase in scientific and technical personnel will provide the agency with its own expertise to contribute independent policy advice to the President, Executive Office, and the Congress.

The agency program accomplishments and plans for future activities are described in detail in the budget justification.

This concludes my prepared statement. The Members of the Council and I would be happy to answer any questions you have regarding the Council and our fiscal year 1987 appropriation request.

SUBSTANTIVE STAFF FOR FY 87

Mr. STOKES. Thank you very much, Chairman Hill.

This Committee has been urging CEQ to hire some technical and scientific staff for several years. We are pleased to hear of your plans to hire three additional substantive staff in 1987.

We are puzzled, though, that CEQ's highest priority is a Science Advisor. Don't we already have a Science Advisor over at OSTP?

Mr. HILL. This would be a scientist at the Council. It would not be somebody that is a co-equal of the Science Advisor who is a Presidential appointee.

Mr. STOKES. At what levels will these positions be filled at?

Mr. HILL. We are not sure at this time. Once we have the appropriation in hand we will be able to establish the levels. I assume these would be mid-range.

We certainly can't afford much more.

Mr. STOKES. When we meet next year do you plan to have on-board the three additional scientific and technical staff?

Mr. HILL. Yes, indeed.

ADMINISTRATIVE STAFF CHANGES

Mr. STOKES. In 1985 CEQ had a full time administrative officer and a half-time executive officer. But in 1987, both these positions are abolished. Who is going to keep the office running?

Mr. HILL. We will share out the remaining administrative tasks among existing support staff and with the Office of Administration staff.

ENVIRONMENTAL POLICY AGENDA

Mr. STOKES. Page 8 indicates the CEQ's primary responsibility under the NEPA law as "establishing an environmental policy agenda." Do you believe the CEQ has been successful and effective in defining the environmental policy agenda?

Mr. HILL. Not as successful as I would like, but I think we have had some success. I think we have in limited terms, in terms of the long-term research and development project we finished in March of 1985 and we are following up to at this point.

Mr. STOKES. How do you think CEQ will operate differently with the additional staff?

Mr. HILL. I think it will give us more flexibility to carry on projects within the Office itself rather than having to reach out and borrow expertise from other agencies.

NEPA REFERRAL PROCESS

Mr. STOKES. The bottom of page 12 lists as a 1985 accomplishment an evaluation of the CEQ referral process. What did you conclude? Is the process working?

Mr. HILL. The process is working. The annual report that was just published includes a survey of all 22 referrals the Council has had since it was established. In addition, there would be a complete study of recommendations prepared by the contractor who did that work for the annual report and then there will be the follow up with recommendations.

Mr. Stokes. Whatever happened to the Palmdale Airport E that was referred to CEQ?

Miss Bear. As I remember, that referral is still in existence. It not active at the moment. The status seems to be that the A Force has to keep the referral on the books while they negotia with the City of Los Angeles an agreement which would make clear that Palmdale would not be expanded into an internation airport.

Until that discussion with Los Angeles is concluded, it is on t books, but we are not proceeding with it in any active way.

LONG-TERM ENVIRONMENTAL RESEARCH CONFERENCE

Mr. Stokes. Page 18, the middle of the page, discusses long-ter environmental research. It appears that CEQ's activities real amount to just canvassing the agencies to see what they are ready doing; is that correct?

Mr. Hill. No. We started this project and called on not ju agency representatives, but individuals, respected individuals fro the private sector, that is, not only business, but the academic cor munity and the environmental community as well, and drew the individuals together to develop an agenda which we have transmi ted to all agencies within the Executive Branch and to Members Congress.

I sent one copy to each of the Members of Congress that set o an agenda for what this group perceived as the long-term nee reaching out the next 18 to 20 years. We have also followed with a specifically oriented set of discussions with regard to furth research needs at Superfund sites and related matters. We are no working with the Conservation Foundation on a follow-up proje on the question of health risk from cross media pollution.

Mr. Stokes. EPA's exploratory research request is down again i 1987 by 35 percent. Wouldn't we be better off with less coordin tion and more money?

Mr. Hill. These projects are joint projects and I think the theo that we have followed is if each of the participating agencies pu in a small amount of money, the aggregate is sufficient to carry o some of these activities. Again, we are not doing original researc here. We are trying to say what are priorities, what are the t issues.

CEQ ANNUAL REPORT

Mr. Stokes. CEQ's budget is at an all-time low this year $670,000 after Gramm-Rudman, yet the annual report to Congre was delivered in February. Is there a cause/effect relationship does this just reflect Jackee Schafer's stewardship?

Mr. Hill. I think Jackee did a heck of a job on the annu report.

WORST CASE ANALYSIS REGULATION

Mr. Stokes. Page 25 mentions the worst case analysis regulatio This single short regulation has been under revision by CEQ fo almost two years. Aren't the delays rather excessive?

Mr. HILL. We tried, Mr. Chairman, to gather together opinion from the public and from the concerned Federal agencies. We feel we have achieved a consensus on an approach for dealing with those times when the preparer of an EIS faces missing or incomplete information.

We will be coming with a proposal that is currently at the Office of Management and Budget for final regulatory review which lays out a system for agencies to deal with.

We believe it is superior to the worst case analysis requirement's which we felt was limitless. Everyone at the table, if we put a set of factors before us, could think of one other factor that could make the "worst" case even more worse. The system we are talking about is one in which credible scientific evidence would be brought to bear on those gaps in information.

We hope to have that published by the end of the month. If not, it will be the first week in April, and yes, it has been a long time, but I think we have done a good job and we are going to be glad to be done with it.

STANDARD LEVEL USER'S CHARGE

Mr. STOKES. Let's turn to page 40. Next year additional columns should be included to compare the original budget request with the latest estimate for the current year. For example, the original 1986 request for SLUC was $115,000. Why has the current estimate been decreased from $115,000 to $75,000?

Mr. HILL. Because more office space is being occupied by the Acid Precipitation Task Force staff, the small coordinating staff, and that is being billed directly to the Management Fund rather than through the CEQ appropriation account. The Acid Precipitation Task Force receives contributions from the 13 member agencies to finance its operations.

So it is bearing its cost in a separate item. The budget request was designed to provide more clear accounting of where the CEQ SLUC is going versus the other SLUC and to answer the questions that had been asked earlier about transfers between our Management Fund and our appropriation account.

We dealt with the accounting people at the Office of Administration and they suggested this would be a more clear way of separating out those costs so that the costs are recognized, in that acid rain is paying its fair share, and we are paying our fair share.

Mr. STOKES. Why does SLUC further decrease in 1987 to $66,000? You are going to have an additional 3.5 FTES.

Mr. HILL. The Acid Precipitation Task Force will be occupying additional space which results in a drop. We have space available. Now, everyone is not going to have their own office in 1987.

We will have people doubling up, but the offices at the Council are adequate space-wise so that we can double people up without making them overcrowded.

OTHER SERVICES REQUEST

Mr. STOKES. The original 1986 request for other services was $102,000. Why has that dropped to $2,000?

Mr. HARSHMAN. I believe that the funding request was for some contract work that we were intending to do with the Risk Assessment Task Force in the Executive Office of the President. That task force did not do the contract work and so we used the money in a different way.

DETAILEES TO CEQ

Mr. STOKES. Next year's justification should also expand the table on page 44 to provide estimates for the budget year. Would you provide for the record the number of reimbursible and nonreimbursible detailees in 1985 and 1986.

[The information follows:]

OFFSET
CAMERA COPY

DETAILEES TO CEQ*

PARENT AGENCY	RESPONSIBILITIES	MONTHS OF SERVICE	FISCAL YEAR(S)	REIMBURSABLE
Department of Agriculture	Secretary	12	1985	No
Department of Agriculture	Science Policy	2	1985	No
Department of the Interior	Environmental Monitoring and Data	12	1985	Yes
Department of the Interior	Environmental Trends Report	12	1986	No
Environmental Protection Agency	Annual Report Global Environmental Issues	12	1985	Yes
Environmental Protection Agency	Annual Report	6	1986	No
Government Printing Office	Annual Report -- Printing, Binding & Distribution Public Affairs	5	1985	No
Department of State	Global Environmental Issues	12	1986	No

*As of March 19, 1986

MANAGEMENT FUND STUDIES

Mr. **Stokes**. Page 49 mentions studies conducted under the Management Fund concerning pesticide registration fees and hazardous waste enforcement. These programs are solely within EPA's jurisdiction.

Why were they conducted under the CEQ Management Fund?

Mr. **Hill**. Bill?

Dr. **Mills**. From time to time the Environmental Protection Agency has a need for a study to be done in the minimal amount of time and the apparatus at CEQ, the Management Fund, is appropriate to get a RFP out to the professional and technical companies in this country with the expertise to do the work in a very short period of time.

So that is the reason why they come through our shop and that is to get work done expeditiously and at competitive cost.

Mr. **Stokes**. Why should CEQ get involved in the program-specific details about fees by EPA on pesticide registration?

Mr. **Hill**. As I recall, this was a request from EPA. In addition to the reasons Bill has offered, EPA approached us and asked about the potential of our doing some of these studies so that a study was done at arm's length from their office while they are considering these issues.

So that question is involved as well.

Mr. **Stokes**. Do you believe fees should be collected on the re-registration of pesticides, as well?

Mr. **Hill**. That is a potential, I believe, that should be examined.

Mr. **Stokes**. Page 53 indicates that obligations dropped in the Management Fund from $1,940,000 in 1985 to $1,352,000 in 1986. What accounts for this decrease?

Mr. **Hill**. We had less contract work. I think it is also a result of tightening budgets as well.

Mr. **Stokes**. On the next page is a figure $26,000 for travel under the Management Fund. Those funds do not represent the travel of any CEQ Members or staff, do they?

Mr. **Hill**. No, they do not. As you can see on that page, Mr. Chairman, we have divided the Management Fund by division and this is division 200, which is the Acid Precipitation Research Program.

We have done this so we can specifically identify budgets and expenditures by program.

Mr. **Stokes**. A great number of contracts are listed under the Management Fund. They seem to cover the water front. Turn to page 60. Let's take one of those, the second from the top, the paper entitled "Economy in the Science of Environmental Quality."

Now, we didn't just finance someone's Ph.D. thesis, did we?

Mr. **Hill**. No. The individual is a Ph.D. already.

Mr. **Stokes**. What was the purpose of that contract?

Mr. **Hill**. That one we did, as I recall, in cooperation with the Department of Agriculture. The Department of Agriculture was interested in that particular study.

Mr. **Stokes**. Was the procurement competitive or sole source?

Mr. **Harshman**. It was a sole source contract. I think that one of the other reasons we were doing that study is it was a potential interest to us for the annual report. We thought we might use that study in doing the annual report.

ACID PRECIPITATION

Mr. **Stokes**. In closing, let me note that CEQ's justification has continued to improve steadily. The information on the Management Fund was most helpful. We look forward to the additional pieces of information to be provided next year.

We know Prime Minister Mulroney is in Washington this week to meet with President Reagan on acid rain. Can you give us any indication whether the President will endorse the special envoy report?

Mr. **Hill**. That is a very good question, Mr. Chairman.

Mr. **Green**. If he hadn't asked it, I would have.

Mr. **Hill**. Let me explain, Mr. Chairman.

Jackee Schafer participated in the working group which developed the background paper to be considered by the Domestic Policy Council. I participated in that meeting.

It was a very interesting discussion. The President indicated at that time that he had not made up his mind and would give consideration to all the viewpoints expressed. As one would assume, the points of view ranged all the way across the spectrum from total endorsement of the Lewis-Davis report to total opposition.

It was a very thorough debate and I know the President is well aware of the seriousness with which the Canadians view this issue. He views it seriously, as well.

Mr. **Stokes**. Mr. Green?

Mr. **Green**. Following up on that, would you care to comment on the latest NAS report?

Mr. **Hill**. I haven't had a chance to read it. It was out—what?—last Thursday? I have only seen the press release.

WORST CASE REGULATION

Mr. **Green**. In August of last year you proposed a new regulation requiring all Federal agencies to disclose and evaluate reasonably foreseeable environmental impacts, including remote but potentially catastrophic consequences, provided these effects have credible scientific support and are not based on pure conjecture.

Where does that regulation stand at this point?

Mr. **Hill**. We are about to go final with it. When the comment period closed, my colleagues and I and Dinah spent a considerable amount of time reviewing 184 public comments which amounted to close to 500 pages.

I know that is not much when one considers the regulatory scheme, regulations proposed at EPA and so forth. We have prepared a final regulation which is now at the Office of Management and Budget for regulatory review which I feel captures the spirit of what we set out to do but also takes into account comments offered from the public.

What we are seeking is a system that is more manageable than worst case. I think the four step process we have proposed in that regulation is one that will be more manageable for Federal agencies.

GREENHOUSE EFFECT

Mr. **Green**. If I could turn to another area, that is the so-called greenhouse effect, I gather there is now a reasonable body of opinion in the scientific community that it is almost inevitable that we are going to have some global warming and rise in sea levels. Just to show the kind of impact here, a study was recently conducted in the New York metropolitan area by a group known as the Citizens Union Foundation on Water Supply in New York, which raised the possible effects that such a greenhouse effect could have in terms of New York City water supply. Basically, a warmer climate and salt infiltration in the New York metropolitan area could stress the water supply system for the New York metropolitan supply far worse than the recent drop did.

Have you been looking at that?

Mr. **Hill**. We have not look at this closely, but I know EPA has. I believe that whether or not there are treaties or conventions pending before the Senate, we, in the United States, are proposing to enter into agreements with other nations to begin joint study on these questions.

Now, the last study from the National Academy said that, yes, we may have a problem but they concluded it is a longer range, in the range of 100 to 200 years. I did have a chance to talk to the Chairman of that panel at the National Academy and he said what we need to do now is start our research program, not move in any crash control efforts.

It is a caution light, I think, is what he called. So I know that we are moving forward and I am sorry I can't recall whether they are treaties or conventions or whatever are pending.

Mr. **Green**. Do you have any sort of time table for this effort in terms of the research?

Mr. **Hill**. I am not that familiar in great detail.

Mr. **Green**. Who would be in charge of the research?

Mr. **Hill**. The Department of Energy is the overall coordinator for the Executive Branch on the carbon dioxide research effort.

Mr. **Green**. I gather there have been some who think this problem even more dangerous, if you will, than carbon dioxide are other trace elements in the atmosphere.

Mr. **Hill**. Yes, the CFCs, of course.

Mr. **Green**. Who would be looking at that? Would that also be the Department of Energy?

Mr. **Hill**. I would have to give you a more informed response.

Mr. **Green**. Could you supply that for the record?

Mr. **Hill**. Sure.

[The information follows:]

Studies About Stratospheric Modification

The Clean Air Act requires the Environmental Protection Agency to study "the cumulative effect of all substances, practices, processes and activities which may effect the stratosphere. . . ." (42 USC 7453) EPA is the lead agency for studies about halocarbons (C F Cl 3 and C F 2 Cl 2). EPA is sponsoring an "International Conference on Health and Environmental Effects of Ozone Modification and Climate Change" under the auspices of the United Nations Environment Program. The Conference will be held at the Hyatt Regency Hotel in Crystal City, Virginia, from June 16 to 20, 1986.

CLOSING STATEMENT

Mr. GREEN. Thank you, Mr. Chairman.

Mr. STOKES. Chairman Hill, we thank you and your colleagues very much for your appearance here this morning, and look forward to seeing you again next year.

Mr. HILL. Thank you.

[Justifications follow:]

February 3, 1986

TRANSMITTAL STATEMENT

The Honorable Jake Garn
Chairman
Subcommittee on HUD-Independent Agencies
Committee on Appropriations
United States Senate
Washington, D.C. 20510

The Honorable Edward P. Boland
Chairman
Subcommittee on HUD-Independent Agencies
Committee on Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Gentlemen:

I hereby submit the President's Budget Request for Fiscal Year 1987 for the Council on Environmental Quality and the Office of Environmental Quality. This document is intended to explain the agency's statutory mandate, its purposes and objectives. Budgetary data and a narrative statement are presented to justify proposed programs and activities.

A. Alan Hill
Chairman, Council on Environmental Quality
Director, Office of Environmental Quality

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PROPOSED APPROPRIATION LANGUAGE

COUNCIL ON ENVIRONMENTAL QUALITY

AND

OFFICE OF ENVIRONMENTAL QUALITY

For necessary expenses of the Council on Environmental Quality and the Office of Environmental Quality, in carrying out their functions under the National Environmental Policy Act of 1969 (Public Law 91-190), the Environmental Quality Improvement Act of 1970 (Public Law 91-224), and Reorganization Plan No. 1 of 1977, including not to exceed $500.00 for offical reception and representation expenses, and hire of passenger motor vehicles, $820,000.00.

BUDGET OVERVIEW

BUDGET REQUEST FOR FY 1987

The Council on Environmental Quality and the Office of Environmental Quality are requesting a budget authority of $820,000 for fiscal year 1987. This level of funding is $120,000 (or 17 percent) above the agency appropriation for FY 1986 as originally passed by the Congress, and $150,000 (or 22 percent) more than the amount actually available under the Balanced Budget and Emergency Deficit Control Act (PL 99-177). The President's Budget Request for CEQ/OEQ is intended to recognize the resources needed to support an authorized personnel ceiling of 13 full time equivalents (FTES). (Three and one-half positions were unfunded in FY 1986). This proposed appropriation reflects a budget which will enable the agency to fulfill its statutory objectives in a cost-effective manner.

This is not a request for additional funding to implement new programs. Rather, it reflects recognition of the resources required to operate the agency at the 13 full-time equivalent level. Overall funding for the Executive Office of the President (EOP) was determined with deficit reduction objectives in mind. The CEQ/OEQ request is within planning limits established for the EOP.

By making an FY 1987 Budget Request for $820,000, the Administration supports CEQ/OEQ as an important element of the federal establishment and asks the Congress to do likewise.

The Council/Office will spend approximately 77 percent of its funds on salary and benefit costs. Of the remaining balance of funding requested, approximately eight percent will be for Standard Level User charges and 15 percent will be expended on such items as travel, telephones, printing and supplies. CEQ/OEQ will continue to receive "other government support" for interagency projects and to utilize contractors to accomplish specialized tasks.

For additional details, a tabular presentation of anticipated FY 1987 expenditures is included in the Budget Summary, page 37.

EXPLANATION OF INCREASES AND DECREASES

In order to conduct the program proposed by the Council on Environmental Quality and Office of Environmental Quality for FY 1987, a restoration of funding to previously planned levels will be required. This will involve an increase over the appropriation received by the Council in FY 1986. The major components of the proposed CEQ program are described below.

A. By Object Classification

1. Personal Compensation and Benefits

An additional amount of $635,000 is requested for personnel compensation and benefits for 13 FTEs in FY 1987. Of this figure, $582,000 is for personnel compensation and the remaining $53,000 is for benefits. With these funds, the Council can be properly staffed to better fulfill all statutory responsibilities. This will enable CEQ/OEQ to make major contributions to the Administration by assisting the White House, OMB, and other agencies in environmental policy analysis and formulation; aiding federal agencies to comply with environmental impact statement requirements of NEPA; monitoring, analyzing and reporting on environmental conditions and trends; and preparing the President's annual Environmental Quality Report.

The agency FY 1987 personnel structure represents a net increase of 3-1/2 Full Time Equivalent employment positions (FTEs). In all, four new positions will be created. This includes two environmental specialists with technical/scientific training, a NEPA specialist to assist the General Counsel, and a support staff position to provide editorial services for the annual Environmental Quality Report and clerical assistance with agency administrative functions.

The half-time Executive Officer position has been abolished in fiscal year 1986, leaving the incumbent available to assume full-time duties as the Deputy General Counsel. (This is a reassignment of duties for an existing staff member serving in part-time capacities as both Executive Officer and Deputy General Counsel; it has no impact on FTE level.) In the second quarter of FY 1986, the agency Administrative Officer was detailed on a reimbursable basis to the Environmental Protection Agency. The position will be abolished at the end of this fiscal year. The position is only half-time in FY 1986 and will be eliminated in FY 1987. This produces a decrease of one-half FTE for the next fiscal year. The net effect of these personnel actions is to add 3-1/2 FTEs in fiscal year 1987.

The Council/Office will use the additional positions to acquire technical and scientific talent. The top priority for the agency in FY 1987 is to establish the position of Science Advisor. This person would advise the Chairman and Members on technical issues, represent CEQ/OEQ at substantive meetings between agencies, contribute to the annual Environmental Quality Report, and assist the General Counsel in technical evaluation of environmental impact statements. The Advisor would also be assigned as the agency's executive level coordinator for "global" issues, such as biological diversity, climatic change, water availability, and population.

The Council/Office also plans to hire an environmental technician to oversee its environmental data and monitoring program. This permanent position is needed to maintain close contact with monitoring offices in other federal agencies and keep the Council abreast of changes in this field. Other important responsibilities for that person are to develop a system of regular reporting of new data to the Council for use in the annual Environmental Quality Report, and to work on the improvement of environmental indicators.

The NEPA specialist will assist the General Counsel in bringing basic oversight activities up to a desirable level, and in providing long overdue supplementary materials needed for environmental review of issues in a timely manner. This individual will also be assigned to coordinate the legislative referral process, which is currently understaffed.

The remaining position is for a support staff member to assist with preparation of the annual Environmental Quality Report and to assume other clerical duties.

This additional staff is required so that the Council/Office can fulfill its statutory responsibilities under NEPA, 14 other federal laws, two treaties, and three Executive Orders. This level of technical personnel is required for achieving agency goals in fulfilling its legislative mandate.

2. Travel and Transportation of Persons

An additional amount of $15,500 is requested for agency travel and transportation of persons. This is an increase of $2,500 over the amount budgeted for fiscal year 1986, and will be used for anticipated travel expenditures which are necessary, appropriate, and directly related to statutory requirements. In order to fulfill the agency mission, the Council Members and agency staff are required to take trips for presentations, meetings and conferences related to:

a. acid precipitation,

b. oversight and implementation of the National Environmental Policy Act,

c. the Nuclear Waste Policy Act,

d. global and international environmental issues,

e. Environmental programs and activities of other federal agencies, and

f. organizations concerned about the environment.

This is a realistic estimate and represents a proportional increase for the additional staff to be hired next fiscal year. It is important for CEQ officials to attend these meetings to gather information first-hand and engage in substantive consultations with environmental experts.

3. Other Rent, Communications and Utilities

An additional amount of $102,000 is requested for Other Rent, Communications, and Utilities. Of this amount, $66,000 will be used for the Standard Level User's Charge (SLUC), and $27,000 will be used for communications services. The remaining $9,000 will be used for postal services. The Council/Office has been able to realize savings projected at $6,000 in FTS charges by installation of a new telephone system.

4. Furniture and Equipment

An additional amount of $10,000 is requested for Furniture and Equipment. Due to limited budgets for the last several years, the Council/Office has not had adequate funds for the acquisition and/or upgrading of its word processing equipment. This is a nominal investment with a high payoff, since it increases the productivity of the staff. In addition, CEQ/OEQ has not replaced its carpet since it first occupied the townhouse complex in 1970. The Council needs funding to replace its deteriorating carpet and furnishings.

5. Other Services

An additional amount of $10,000 is requested for Other Services. A portion of these funds will be reserved as the Council's contribution to the interagency environmental policy development studies it conducts from its Management Fund.

B. By Program Activity

The President's Budget request for CEQ/OEQ provides the resources needed to accomplish its mission as the Executive Branch environmental convener. A complete list of the agency's continuing statutory responsibilities is provided in Appendix F. The specific program activities to be funded by this increase are listed in the table below.

MAJOR AGENCY RESPONSIBILITIES AND STATUTORY DUTIES	ADDITIONAL ACTIVITY
STATUTORY DUTIES	
1. NATIONAL ENVIRONMENTAL POLICY ACT, AND	
2. ENVIRONMENTAL QUALITY IMPROVEMENT ACT	
Streamlining NEPA environmental review process	Agency could take initiative to determine whether NEPA process can be improved.
Predecision referrals of Proposed Federal Actions Determined to be Environmentally Unsatisfactory (40 C.F.R. 1504)	Could independently handle referrals and meet regulatory deadlines.
Requests for NEPA assistance from federal agencies, state and local governments and citizens.	Could handle inquiries and requests for help efficiently.
NEPA publications, studies, etc.	Publications which would be useful to parties involved in the EIS process.
Review of agency NEPA procedures	Procedural and substantive review on an expeditious basis.
3. NUCLEAR WASTE POLICY ACT OF 1982	
CEQ charged with reviewing guidelines and environmental impact statement for selection of facility	Could better fulfill statutory oversight responsibilities by initiating studies about environmental concerns.

4. INTERNATIONAL ENVIRONMENTAL PROTECTION ACT	Could participate more actively with AID in developing a U.S. strategy to protect and conserve biological diversity in developing countries.
5. ENVIRONMENTAL DATA AND MONITORING	
Environmental Data and Monitoring Program	Could make specific recommendations to agencies for improvements in monitoring and research needs.
Obtain data for assessment of environmental trends	Could develop a system for regular reporting to CEQ of new data and possibly of automatic calculation of environmental indices from the data.
Environmental Indicators	Could do some independent work and specify work to be done by others to improve environmental indicators, such as biological diversity.
COMMISSIONS, COMMITTEES, AND INTERAGENCY TASK FORCES	
INTERAGENCY TESTING COMMITTEE ON THE TOXIC SUBSTANCES CONTROL ACT	Would perform proportionate share of evaluation of chemicals, and provide additional staff assistance for the Committee.
CABINET COUNCIL WORKING GROUP ON NATURAL RESOURCES AND THE ENVIRONMENT	Would oversee development of Administration's policy initiatives and ensure the agency statutory duties are met. Would assist in implementing agency's and the Administration's policy initiatives in appropriate forums.
INTERNATIONAL WHALING COMMISSION	
TREATIES AND INTERNATIONAL AGREEMENTS	
"LEGAL AND ADMINISTRATIVE MEASURES OF ENVIRONMENTAL PROTECTION," US/USSR ENVIRONMENTAL AGREEMENT	Could fulfill obligations in planning and executing exchanges of delegations.
US/JAPAN AGREEMENT ON "COOPERATION IN THE FIELD OF ENVIRONMENTAL PROTECTION"	

EXECUTIVE ORDERS

EXECUTIVE ORDER 12114 (ENVIRONMENTAL EFFECTS OF MAJOR FEDERAL ACTIONS ABROAD) OVERSIGHT RESPONSIBILITIES	Comprehensive oversight and recommendations as to changes needed in E.O. or implementation.
EXECUTIVE ORDERS 11644 & 11989 (OFF-ROAD VEHICLES ON FEDERAL LANDS)	

The increase in funding for personnel would be used to hire additional environmental specialists with technical and scientific training. This would provide the agency with its own expertise to contribute independent policy advice to the President, Executive Office, and the Congress. This change specifically addresses concerns expressed in Congressional budget hearings about the agency personnel structure.

FY 1985 AND FY 1986 RESOURCE LEVELS

In FY 1985, the Council's budget authority consisted of a regular Appropriation of $700,000 and a Reappropriation of $175,000 from savings under a water study contract for a total of $875,000. (In a previous fiscal year, the Congress had provided a $600,000 supplemental appropriation to CEQ to conduct feasibility studies for a Water Resources Research Center and an Information Clearinghouse. The Council was able to complete the work for $208,700.) The Council's personnel utilization in FY 1985 was 11 FTE's.

The purpose of the Reappropriation was to expand NEPA oversight activities and to strengthen the technical and scientific expetise of the Council/Office. The Council expended $15,000 for the publication of three Appendices to the NEPA Implementation Procedures in the Federal Register. The Appendices are intended to improve public participation and facilitate agency compliance with the National Environmental Policy Act. CEQ/OEQ obligated $104,000 to reimburse other federal agencies for two detailees. The Environmental Protection Agency provided one of the detailees to assist in preparation of the annual Environmental Quality Report. An environmental monitoring specialist was acquired from the Department of the Interior for assistance in implementation of the agency environmental monitoring and data program. In addition, $8,000 was applied to the contract work for the Environmental Trends report. The remaining $48,000 was spent for agency operating expenses, with the majority (92 percent) used for personnel compensation and benefits.

For FY 1986, the Council is operating with a revised budget authority of $670,000. This is the amount available for an Appropriation of $700,000 with the sequestration of funds mandated by the Balanced Budget and Emergency Deficit Control Act. Due to the budget reduction, CEQ/OEQ will operate at an FTE level of 9-1/2 this fiscal year. (Actual FTE count is 11, but the program analyst is on a full-year reimbursable detail from CEQ to the National Oceanic and Atmospheric Administration for its acid precipitation program and the Administrative Officer is on a part year reimbursable detail to EPA for its Regulatory Negotiation Project. The Administrative Officer position will be abolished at the end of the current fiscal year.)

AUTHORIZATION AUTHORITY

The Council on Environmental Quality was granted a permanent budgetary authorization of $1,000,000 per year under the National Environmental Policy Act (P.L. 91-190). The Office of Environmental Quality is subject to reauthorization for fiscal year 1987. The agency request of $820,000 represents the resource requirements of both the Council and the Office, and anticipates enactment of an OEQ reauthorization bill.

BASIS OF CEQ/OEQ ROLE

The question is sometimes raised as to whether there is a genuine need for a Council on Environmental Quality in addition to the Environmental Protection Agency. By design and in practice, the statutory roles of CEQ/OEQ and EPA are quite different. In this regard, it is important to note that the Congress determined there was a need for an agency to act as the environmental convener for the Executive Branch. Under the National Environmental Policy Act, the Council was given the primary responsibility for establishing an environmental policy agenda, settling interagency environmental disputes, and coordinating federal environmental programs. It is an independent agency not preoccupied with mission-oriented programs of line agencies, like EPA. As a high level entity within the Executive Office of the President (EOP), the Council/Office has the statutory mandate to provide oversight for the environmental review process as administered by other federal agencies. In addition, the agency is required by law to coordinate environmental activities within the Executive Branch and mediate environmental disputes between agencies. In both the National Environmental Policy Act and the Environmental Quality Improvement Act, Congress clearly ennunciated the national environmental policy and established CEQ and OEQ to oversee implementation and further development of positions by each Administration. As an EOP agency, the Council/Office also acts as the environmental spokesman and representative for the President.

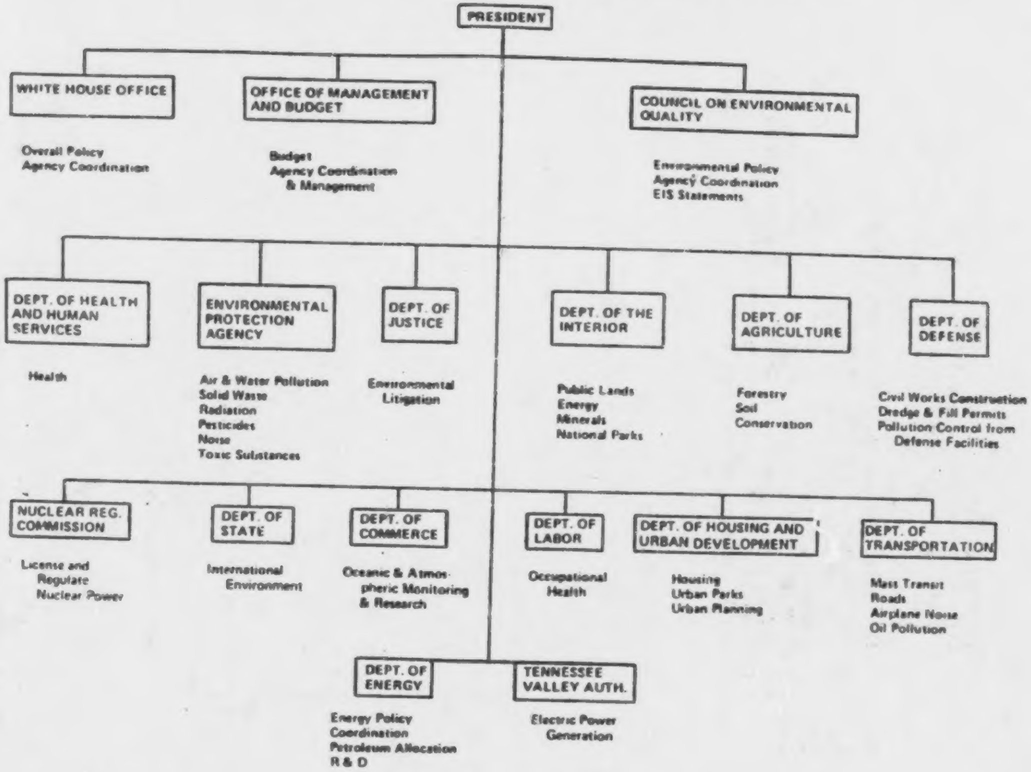
The relationship between the Council/Office and other federal agencies is illustrated in the organizational chart entitled "Major Executive Branch Agencies with Environmental Responsibilities," appearing on the next page.

ORGANIZATION OF THE AGENCY

The agency is comprised of two entities: a Council on Environmental Quality established by the National Environmental Policy Act (P.L. 91-190) and an Office of Environmental Quality organized pursuant to the Environmental Quality Improvement Act (P.L. 91-114). The Council itself (CEQ) is a three-member body of Presidential appointees. The Office (OEQ) provides the technical and administrative staff for the Members, and support for the Council.

A Chairman for the Council is selected from among the Members by the President. Agency coordination is achieved by the statutory designation of the CEQ Chairman to serve as the Director of the Office of Environmental Quality. The Chairman/Director is responsible for administrative decisions affecting the conduct of the Council and its activities; he is also empowered to direct the fiscal, legal, programmatic, and legislative affairs of the Office.

MAJOR EXECUTIVE BRANCH AGENCIES WITH ENVIRONMENTAL RESPONSIBILITIES


PRESIDENT
WHITE HOUSE OFFICE
Overall Policy
Agency Coordination
OFFICE OF MANAGEMENT AND BUDGET
Budget
Agency Coordination & Management
COUNCIL ON ENVIRONMENTAL QUALITY
Environmental Policy
Agency Coordination
EIS Statements
DEPT. OF HEALTH AND HUMAN SERVICES
Health
ENVIRONMENTAL PROTECTION AGENCY
Air & Water Pollution
Solid Waste
Radiation
Pesticides
Noise
Toxic Substances
DEPT. OF JUSTICE
Environmental Litigation
DEPT. OF THE INTERIOR
Public Lands
Energy
Minerals
National Parks
DEPT. OF AGRICULTURE
Forestry
Soil
Conservation
DEPT. OF DEFENSE
Civil Works Construction
Dredge & Fill Permits
Pollution Control from Defense Facilities
NUCLEAR REG. COMMISSION
License and Regulate Nuclear Power
DEPT. OF STATE
International Environment
DEPT. OF COMMERCE
Oceanic & Atmospheric Monitoring & Research
DEPT. OF LABOR
Occupational Health
DEPT. OF HOUSING AND URBAN DEVELOPMENT
Housing
Urban Parks
Urban Planning
DEPT. OF TRANSPORTATION
Mass Transit
Roads
Airplane Noise
Oil Pollution
DEPT. OF ENERGY
Energy Policy
Coordination
Petroleum Allocation
R & D
TENNESSEE VALLEY AUTH.
Electric Power Generation

SOURCE: Environmental Protection: Agenda For The 1980's, General Accounting Office
CED-82-73 May 5, 1982

AGENCY STAFF STRUCTURE

The Council on Environmental Quality (CEQ) is composed of Chairman A. Alan Hill and Members William L. Mills and Jacqueline E. Schafer. Chairman Hill previously served in the California state government as Assistant to the Secretary for Resources and as Deputy Secretary for Agriculture and Services. Member Mills is a biologist and a former associate professor of environmental engineering at Vanderbilt University. He holds a doctorate degree in Environmental Engineering and Water Resources. Member Schafer joined the Council in June, 1984 after serving as Regional Administrator of the Environmental Protection Agency, Region II, in New York City. Previously, she was a Professional Staff Member of the Senate Committee on Environment and Public Works for five years. Chairman Hill and Member Schafer are managers of environmental technical programs, with extensive previous training and experience. Member Mills is an environmental scientist.

Agency Personnel	FY 1985	FY 1986	FY 1987	Change
Scientific and Technical Staff				
Chairman	1	1	1	0
Members	2	2	2	0
Environmental Law Specialists	2	2-1/2	4	+1-1/2
Environmental Scientists/Technicians	0	0	2	+2
Annual Report/Publications	1/2	1/2	1	+1/2
Staff Economist	1/2	0	0	0
Policy Analyst*	1/2	0	0	0
Administrative and Clerical Staff				
Executive Officer	1	1/2	0	-1/2
Executive Assistant to the Chairman	1	1	1	0
Administrative Officer*	1	1/2	0	-1/2
Confidential Assistants/Secretaries	1-1/2	1-1/2	2	+1/2
Total Work Years Utilized	11	9-1/2	13	+3-1/2

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*In FY 1986, the Policy Analyst is on a full-year, reimbursable detail and the Administrative Officer on a half-year reimbursable detail, as previously explained.

The Office of Environmental Quality (OEQ) provides the technical and administrative support for the Council. The increased funding requested by the agency will be used to hire two environmental scientists, a NEPA specialist, and provide editorial support for the annual Environmental Quality Report. In addition, the administrative functions previously performed by the Executive Officer and Administrative Officer will be distributed among the existing support staff.

For FY 1986, personnel from other agencies assisting CEQ/OEQ with joint projects include two environmental monitoring specialists, an environmental data analyst, an environmental attorney, and an environmental regulations specialist. The Council anticipates the utilization of other government support from federal environmental agencies for additional joint projects in FY 1987.

KEY STATUTORY MANDATES

The President's Budget Request is designed to enable CEQ to meet its three key statutory mandates:

1. Develop and recommend national policies which foster and promote the improvement of environmental quality to meet the health, natural resource, economic, social and other requirements and goals of the nation.

2. Assist federal agencies in the implementation and coordination of programs and activities which protect and improve environmental quality.

3. Gather and analyze information relevant to conditions and trends in the quality of the environment and to compile and submit to the President recommendations relating to such conditions and trends.

These responsibilities are stated in their general order of importance. Accordingly, the agency's principal responsibility is to provide the President, the Executive Office, and the Congress with timely and authoritative advice on emerging environmental policy issues. The Chairman of the Council is designated under NEPA as the environmental advisor to the President. As such, he insures that the concerns of affected citizens as well as technical and scientific considerations are taken into account in the Executive Office decision making process.

In addition to providing the President with policy advice, the Council is responsible for maintaining policy oversight of the federal government's implementation of the National Environmental Policy Act (NEPA). Two important Council NEPA responsibilities are to promulgate and maintain regulations implementing the environmental review provisions of NEPA and to assist federal agencies to resolve disputes about environmentally unsatisfactory proposals referred to the Council pursuant to NEPA, Section 309 of the Clean Air Act, and the Council's regulations.

The third major responsibility of the agency is to collect and analyze data concerning conditions and trends in the Nation's environmental quality. CEQ/OEQ makes technical environmental information available to the public through the annual Environmental Quality Report and other publications, such as the Environmental Trends report. Within the Executive Branch itself, the Council/Office exerts its influence to enhance interagency coordination of data gathering, storing, sharing and utilizing.

Finally, the agency has a number of other responsibilities resulting from mandates by the Congress, such as co-chairing the Interagency Toxic Sustances Data Committee; and by the President, such as serving as the Executive Secretary for the Interagency Task Force on Acid Precipitation. In all, the Council/Office has continuing responsibilities under 15 statutes, two treaties, and three Executive Orders.

PROGRAM HIGHLIGHTS

A summary of major programs for CEQ/OEQ in Fiscal Years 1985, 1986, and 1987 is presented below.

AGENCY ACCOMPLISHMENTS IN FY 1985

Major programs conducted in FY 1985 include:

ENVIRONMENTAL POLICY ANALYSIS AND DEVELOPMENT

- Published final report and recommendations of the Conference on Long-Term Environmental Research needs.
- Prepared the 15th Annual Report of the Council on Environmental Quality for the year 1984.
- Began review of materials being prepared by the World Commission on Environment and Development, an intergovernmental body formed under the aegis of the United Nations.

INTERAGENCY COORDINATION OF ENVIRONMENTAL QUALITY PROGRAMS

- Performed oversight of NEPA and agency implementing regulations and proposed revisions.
- Issued Advance Notice of Proposed Rulemaking for the "worst case analysis" regulation (40 C.F.R. 1502.22).
- Issued proposed amendment to "worst case analysis" regulation.
- Concluded referral of proposed Tennessee-Tombigbee Wildlife Mitigation Plan by publishing findings and recommendations.
- Received referral regarding proposed Corps of Engineers amendments to their NEPA procedures.
- Initiated special study of referral process aimed at preparing data base of historical information about all past referrals so that effectiveness of process can be evaluated.

- Hosted meeting of the American and Japanese Co-Chairmen of the Environmental Impact Assessment Project under the Agreement Between the United States and Japan in the Field of Environmental Protection.

- Updated and published three appendices to the NEPA regulations.

ENVIRONMENTAL DATA ACQUISITION AND ASSESSMENT

- Established an interagency working group to implement work plans for improvement of environmental data and monitoring systems, and to begin preparation of the Environmental Trends report.

- Transferred the Chemical Substances Information Network to the private sector.

AGENCY ACTIVITIES FOR FY 1986

Major programs being conducted in FY 1986 include:

ENVIRONMENTAL POLICY ANALYSIS AND DEVELOPMENT

- Participating in an interagency effort to oversee implementation of the moratorium on commercial whaling.

- Continuing implementation of the recommendations by the Conference on Long-Term Environmental Research, etc.

- Publishing the 16th Annual Report of the Council on Environmental Quality for 1985.

INTERAGENCY COORDINATION OF ENVIRONMENTAL QUALITY PROGRAMS

- Providing oversight of NEPA and agency implementing regulations.

- Issuing final amendment to "worst case analysis" regulation (40 C.F.R. 1502.22).

- Co-sponsoring a conference with the U.S. Forest Service and Yale University on implementation of amended regulation covering analysis of information.

- Preparing guidance document, at the request of many agencies, to explain implementation of amendment to "worst case analysis" regulation.

- Providing oversight of Executive Order 11644, Use of Off-Road Vehicles on Public Lands.

- Publishing and disseminating a special study of the NEPA referral process, focusing on historical development of the process and an analysis of its effectiveness. Initiating changes in NEPA referral regulations, as appropriate, based upon study recommendations.
- Providing project leadership for "Legal and Administrative Measures for Protecting Environmental Quality," Area IX, under "Agreement on Cooperation in the Field of Environmental Protection Between the U.S. and the U.S.S.R." During FY 1986, this will include hosting a specialist from the U.S.S.R. in the U.S. for a period of up to 90 days.
- Reviewing agency implementation of Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions".
- Reviewing and commenting on the environmental impact statement for Nuclear Waste Repository planned by the Department of Energy.

ENVIRONMENTAL DATA ACQUISITION AND ASSESSMENT

- Completing and publishing the Environmental Trends report.

AGENCY ACTIVITIES PLANNED FOR FY 1987

Major programs planned for FY 1987 include:

ENVIRONMENTAL POLICY ANALYSIS AND DEVELOPMENT

- Participate in interagency advisory committee on whaling activities, which will be focusing on implementation of the international whaling moratorium.
- Publish the 17th Annual Report of the Council on Environmental Quality for the year 1986.

INTERAGENCY COORDINATION OF ENVIRONMENTAL QUALITY PROGRAMS

- Provide oversight of NEPA and agency implementing regulations.
- Follow-up as appropriate on worst case issue.
- Prepare case studies of the relationship between the implementation of NEPA and State "little NEPA" laws in at least three states, and prepare recommendations for improving the interrelationship between the two levels of government.
- Convene conference of environmental review staff from all agencies to survey problems field staff are having in implementing NEPA process and to share ideas for solutions.
- Review implementation of Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions" by federal agencies.

- Receive official delegation from U.S.S.R. under U.S./U.S.S.R. Agreement for the Protection of the Environment and arrange for meetings and site visits throughout the United States.

- Chair environmental assessment project under U.S./Japan Agreement for Environmental Protection.

ENVIRONMENTAL DATA ACQUISITION AND ASSESSMENT

- Follow-up on recommendations to the Council and the scientific community on ways to improve and strengthen the system of monitoring for changes in the environment, etc.

FY 1987 BUDGET JUSTIFICATION

BUDGET PROGRAMS

I. Environmental Policy Analysis and Development

A. Basic Objectives

In order to meet its statutory responsibilities, the agency has adopted the following objectives for its Environmental Policy Analysis and Development Program:

1. Develop and recommend to the President national policies to effectively and economically promote and protect environmental quality.
2. Monitor environmentally-related activities of federal agencies to assure continued environmental quality.
3. Annually report to the President and the Congress, and through them, to the Nation, on the condition of the environment and trends affecting it so that any corrective actions necessary may be initiated in a timely manner.
4. Advise and assist the President and the agencies in achieving international cooperation on environmental programs.

B. Organization and Resource Requirements

Funds in Thousands of Dollars

	FY 85 Actual	FY 86 Estimate	FY 86 Estimate Grm-Rudm	FY 87 Estimate	Difference 1986-1987
Appropriation	272	275	260	310	+50
Reappropriation	100	0	0	0	0
Work Year Utilization	5.0	5.0	4.5	5.5	+1.0
FTE Allocation	5.0	5.0	5.0	5.5	+.5

CEQ/OEQ proposes to allocate a total of 5.5 work years and $310,000 to achieve the environmental policy analysis and development objectives. The additional funding will be used to hire a Science Advisor for the Chairman and Council Members. This individual will provide technical assistance on environmental issues, represent the agency at substantive meetings, and contribute to the annual Environmental Quality Report.

The program responsibilities in this area are primarily assumed by the Chairman and two Council Members. Assistance is provided by technical, legal, and administrative OEQ staff members. The work effort is concentrated in analytical activities and program liaison.

C. Program Responsibilities

1. Presidential Advisor

a. Program Description

CEQ/OEQ has a responsibility to provide expert opinion and policy advice to the President on environmental matters. In fulfilling this responsibility, the Chairman relies on input from other Council Members and the Office of Environmental Quality staff for indepth review of pertinent issues.

This function involves a variety of activities, including:

1. Meetings with White House and Executive Office personnel.
2. Memoranda to Executive Office staff and its agencies, particularly to members of the White House policy development staff and to OMB.
3. Representing environmental viewpoints at Cabinet Council level meetings.

In addition, the Chairman represents the President at formal national and international meetings concerned with environmental affairs. In these meetings, the Chairman acts in concert with heads of other agencies with responsibilities for environmental protection.

In order to enable the agency to provide practical and informed advice to the President, numerous discussions are held with representatives of science, industry, agriculture, labor, conservation organizations, state and local governments, and other groups. The CEQ Chairman conducted 58 such meetings in FY 1985. The resulting dialogue assists CEQ in performing its responsibilities in a manner which is responsive to public needs.

b. Program Accomplishments and Current Activities

CEQ/OEQ has important responsibilities in overseeing implementation of environmental decisions by the President. For instance, the agency is actively involved in both the preparation of and commenting on drafts of environmental messages, executive orders and decision memoranda. In addition, the Council coordinates the process of suggesting candidates for appointment of members of the Marine Mammal Commission. (The Marine Mammal Protection Act requires coordination with the National Academy of Science, National Science Foundation, and the Smithsonian Institution.) CEQ/OEQ also recommends names of individuals for consideration by the Office of Presidential Personnel for other appointments.

The Members of CEQ serve on two White House Cabinet Council Working Groups to help oversee and direct the Administration's environmental policy. Member Mills has assisted the Cabinet Council Working Group on Biotechnology by providing guidance on the adequacy of federal laws and regulations to protect public health and the environment from the possible hazards associated with the products and processes of biotechnology. The Council has also provided input regarding the establishment of an interagency biotechnology risk assessment body. Member Schafer participates in the deliberations of the Cabinet Council Working Group on Energy, Environment, and Natural Resources. In this capacity, she assists in the review of policy issues and prepares briefing papers for the Domestic Policy Council on related subjects.

. During FY 1985, CEQ/OEQ continued oversight of the work of the International Whaling Commission in support of the moritorium on commercial whaling. In this regard, the Council/Office participates in an interagency committee to oversee implementation of the moratorium on commercial whaling, which is to go into effect in 1986.

During FY 1985, CEQ/OEQ issued its report on Long-Term Environmental Research and Development based upon the results of four two-day scientific and technical panel meetings that addressed specific clusters of long-term environmental research and development topics. The purpose of the conference was to discern major scientific issues warranting enhanced government or private sector attention during the remainder of the century.

The report contains the recommendations of the panel chairmen that the federal government accord long-term environmental research heightened priority and a level of support sufficient to ensure the contribution of research findings to the attainment of broad national goals. (See Appendix D.) CEQ has already begun to follow-up the specific recommendations by asking federal agencies to determine which of the measures are currently under implementation or will become implemented in the future. In addition, four interagency projects have been initiated to address the needs identified by the Conference.

First, CEQ, with assistance from the Environmental Protection Agency and the National Institute of Health Sciences, has awarded a contract to The Conservation Foundation to study the effects of environmental exposure from multi-media sources of the same pollutant. A conference will be held on February 10, 1986, and a report written. The Conservation Foundation will also address curriculum changes to improve university education programs for the environmental sciences. A consultants' report will be prepared for this as well.

Second, CEQ is pursuing the recommendation related to the conduct of scientific research at Superfund-type waste cleanup sites. EPA, DOD, DOE, and Clean Sites staff provided resources, and assisted CEQ in convening a meeting to plan for this research. The meeting of approximately a dozen leading scientists from the various involved disciplines and officials from EPA, DOD, and DOE was held in late October of 1985.

Third, CEQ/OEQ, with the Office of Science and Technology Policy and the National Science Foundation, have planned a major review of the scientific bases of risk assessment assumptions in order to strengthen the process and to harmonize and rationalize the approaches across federal agencies. OSTP and NSF are taking lead responsibility for this effort.

Fourth, the Council/Office has also participated in developing recommendations related to anticipating the impacts of emerging technologies. In this area, CEQ/OEQ has focused on biotechnology. CEQ/OEQ and the Office of Science and Technology Policy worked together with the National Science Foundation to review the applicability and suitability of risk assessment methodology in dealing with problems related to biotechnology. A report on this topic specifically addressing environmental applications of biotechnology was released by the NSF in August, 1985.

An additional project relating to federal environmental data and monitoring programs is in the planning stages.

c. Proposed FY 1987 Activities

The Council/Office will continue to advise the President on environmental policies and to assist in the development of the Administration's legislative proposals and Executive Orders concerning the environment and natural resources.

2. Annual Environmental Quality Report

a. Program Description

The Council is required by its authorizing statute to assist the President in preparing a report to Congress on the status of the environment, on the adequacy of natural resources, and on policies and programs that will preserve and improve the quality of the environment. In carrying out this mandate, the Council solicits, coordinates, and assembles into an annual report data and information on environmental quality, including activities of federal and other government agencies which are environmentally significant.

The annual Environmental Quality Report also contains those findings of the CEQ which have been developed independently through its own studies and activities authorized by NEPA and other associated directives.

One Member of the Council has been assigned responsibility for planning and executing the preparation of the annual Environmental Quality Report.

b. Program Accomplishments and Current Activities

The 15th Annual Report of the Council on Environmental Quality for the year 1984 was printed in December, 1985, and released in February of 1986. Five thousand copies of the report were printed for distribution to Members of Congress, federal and state agencies, and interested citizens. The Government Printing Office has printed additional copies for sale tb the public and distribution to the Depository Library System.

In addition to analyzing the status and condition of the various environmental media -- air, waters and the public and private lands -- and the adequacy of the Nation's natural resources, this year's report includes two special analyses. One chapter describes in detail EPA's risk assessment/risk management policy which has been recently instituted to deal with scientific uncertainty and resource management in environmental regulation, and documents in four case studies how it is being applied in routine decision making.

Another chapter reports the findings of a CEQ effort to create an inventory of private sector natural resource conservation activities, including twelve case studies of such efforts in every part of the country. This fulfills a duty of the report to "review programs and activities of . . . nongovernmental entities and individuals with particular reference to their effect on the environment and on the conservation, development and utilization of natural resources." It reveals that the nationwide commitment to environmental protection is indigenous and deep rooted, and not only a response to recent federal programs.

The annual Environmental Quality Report also includes a special analysis of the origins and fate of agency referrals to the Council on Environmental Quality under its NEPA procedures, in view of the recently increased level of referral activity.

Work is underway on the 16th Annual Report of the Council on Environmental Quality for the year 1985. Publication is scheduled for Summer, 1986.

c. Proposed FY 1987 Activities

The agency expects to publish its 17th annual Environmental Quality Report, covering calendar year 1986, in the Spring of 1987. To ensure the quality and timeliness of this reference and policy document, a Member of the Council has been assigned responsibility for supervising all preparation of the annual Environmental Quality Report.

3. International Environmental Issues

a. Program Description

The Council/Office acts cooperatively with the White House advisors and the Department of State and other agencies in developing international environmental policy. It provides expertise and representation of the Administration's views by assigning personnel of specific competence to particular areas of coordination. CEQ/OEQ also performs liaison with representatives of foreign governments and international organizations about mutual interests concerning conservation of the world's resources.

b. Program Accomplishments and Current Activities

CEQ/OEQ has long been active in international environmental issues. A primary focus of involvement for the Reagan Administration has been the Global Issues Working Group, established at the request of the President, in September, 1981. The Global Issues Working Group (GWIG) is headed by the Chairman of CEQ and is comprised of senior policy level representatives from the Department of Agriculture, Department of Commerce (NOAA), Department of Defense, Department of Energy, Department of the Interior, Department of Health and Human Services, Department of Education, Department of State, the Environmental Protection Agency, the Agency for International Development, the Office of Management and Budget, the National Security Council, the Office of Science and Technology Policy, the Federal Emergency Management Agency, the National Aeronautics and Space Administration, and the National Science Foundation. The purpose of the GIWG is to coordinate development of the

Executive Branch's response to some of the most pressing global problems of environment, population and resources raised by recent studies and reports.

During fiscal years 1985 and 1986, CEQ/OEQ and the Global Issues Working Group (GIWG) implemented several of the recommendations of the World Wildlife Fund (WWF) report to the agency about "Corporate Use of Information Regarding Natural Resources and Environmental Quality" (May, 1984).

One of these activities was the publication of a reference manual titled "Gaining Access to U.S. Government Information on the Environment and Natural Resources" by the U.S. Department of Energy and the Council on Environmental Quality as a follow-up to the first recommendation of the WWF report. This publication is designed to acquaint the reader with the broad range of services and publications that are offered by the U.S. Government and that provide information about the environment and natural resources. These sources of information include referral services, public-information offices, computerized data banks, information-analysis centers, and publication-distribution systems, as well as published sources like bibliographies, abstract and index journals, reports, handbooks, and atlases.

In March, 1985, an agency-sponsored report on "Long-Term Environmental Research and Development" was published, which was initiated out of some of the same concerns which prompted the World Wildlife Fund Report. This research document has a number of recommendations which address in part the World Wildlife Fund (WWF) report recommendations. For example, the long-term research report recommends "that CEQ foster an evaluation by an appropriate organization of existing physical, chemical, and biological monitoring programs (and extant data associated with them) to identify and stimulate research and development on improving the quality and cost-effectiveness of monitoring programs." The Council/Office and GIWG are considering both sets of recommendations in developing future plans aimed at making government resource information more useful.

The GIWG focused on development of a Perspective Paper on International Environmental Issues during 1985. Research conducted by GIWG member agencies on various international environmental issue papers has reaffirmed the need for a document to provide consistency of philosophy and approach for federal programs. Forming and articulating a perspective which fairly represents a consensus of existing viewpoints is an arduous and a time-consuming task; however, substantial progress has been made.

Additionally, the GIWG has continued to respond to current international environmental concerns and requests of international organizations, such as overseeing the development of the U.S. response to the United Nations Economic Commission for Europe (ECE) request for a "National Review of Environmental Policies and Strategies."

In FY 1985, Council Member William Mills attended the annual Governing Council meeting in Nairobi for the United Nations Environment Programme and met with diplomats from several governments.

During FY 1985, Council Member Schafer reviewed and commented on drafts of a proposed United States strategy to protect and conserve biological diversity in developing countries. Under the International Environmental

Protection Act of 1983 (P.L. 98-164), such a strategy was directed to be developed by the Agency for International Development in conjunction with CEQ and other agencies, and a report submitted to Congress in FY 1985.

For fiscal year 1986, the agency's primary activity will be to coordinate federal agency activities with the World Commission on Environment and Development (WED). This intergovernmental body is an outgrowth of a U.N. effort aimed at preparing "an Environmental Perspective to the year 2000 and beyond." To help the Council/Office implement this program, the Department of State has assigned a foreign service officer to act as Senior Policy Advisor to Chairman Hill on global environmental issues.

The membership of WED is composed of 22 eminent individuals, each serving in a personal capacity. William D. Ruckelshaus is the only U.S. citizen serving on the Commission. The Commission intends to examine an array of topics ranging from air, water and ocean pollution, hazardous and nuclear wastes, deforestation and soil erosion, to human shelter, land tenure and North/South relationships, on an individual basis, and then assess these issues in terms of their "common sources in sectoral policies and in related economic and trade policies." For example, this analysis could discuss how agriculture, energy and forestry policies impact on the ecological, environmental and natural resources problems of developing countries. Because the scope of the Commission report will be so wide, with no issue central to any single USG agency, the Department of State has asked CEQ to coordinate USG relationships with the Commission's work.

c. Proposed FY 1987 Activities

In FY 1987, CEQ/OEQ will continue to play a leadership role in coordinating the United States response to the Report of the World Commission on Environment and Development. The Report is expected to be debated in the United Nations General Assembly in the Fall of 1987. The Commission is preparing a strategy to deal with environmental challenges foreseen through the year 2000 and beyond.

The agency will again play an active role in the expert deliberations taking place under the aegis of the United Nations Environment Programme to develop Principals and Guidelines on Environmental Impact Assessment. The General Counsel of CEQ has served as the U.S. Representative on the Working Group of Experts on Environmental Law established for this purpose.

In the next fiscal year, CEQ/OEQ will continue to monitor global environmental issues and to act as Chair of the Global Issues Working Group. The agency will also be a participant in ad hoc U.S. committees formed to address special issues, including U.S. preparation for particular international meetings and conferences, as well as monitoring international conventions and treaties. The Council/Office will continue to serve as an environmental policy advisor, observer and/or representative of the Administration to international meetings.

Also in FY 1987, CEQ/OEQ will continue to monitor the implementation of the U.S. strategy to conserve biological diversity in developing countries and advise AID in carrying out specific policies and programs relating to the International Environmental Protection Act of 1983.

II. Interagency Coordination of Environmental Quality Programs

A. Basic Objectives

In order to meet its statutory responsibilities, CEQ/OEQ's basic interagency environmental program coordination objectives are:

1. Promulgate and maintain regulations implementing the procedural provisions of the National Environmental Policy Act that will effectively integrate public involvement and the consideration of environmental impacts into agency decision making.
2. Assist federal agencies in achieving the goals of the National Environmental Policy Act.
3. Assist in coordinating federal programs and statutory environmental review requirements and to develop recommendations for improvement of environmental review requirements.
4. Assist in coordinating federal environmental programs that involve more than one agency.
5. Actively participate in the OMB coordination and clearance process for proposed legislation related to environmental quality.

B. Organization and Resource Requirements

Funds in Thousands of Dollars

	FY 85 Actual	FY 86 Estimate	FY 86 Estimate Grm-Rudm	FY 87 Estimate	Difference 1986-1987
Appropriation	173	250	240	300	+60
Reappropriation	15	0	0	0	0
Work Year Utilization	3.5	3.5	3.0	4.5	+1.5
FTE Allocation	3.5	4.5	4.5	4.5	0

CEQ/OEQ proposes to allocate a total of 4.5 work years and $300,000 to achieve the interagency coordination of environmental program objectives. The additional funds will allow the Office of the General Counsel to respond to requests for NEPA assistance from other federal agencies and from the public in a more expeditious manner, and to identify methods of streamlining the environmental review process. Current resources provide only for selective oversight of NEPA compliance and these additional resources are required to comprehensively perform this major statutory function. The agency will also be able to handle referrals within time limitations established by the CEQ NEPA regulations. The additional funding allocated to this program will be used to convert the Deputy General Counsel to a full-time position and to add a NEPA specialist position to assist oversight of federal environmental review activities.

The NEPA program responsibilities primarily are assigned to the General Counsel's Office. The work effort is concentrated in legal advice, regulation, and institutional coordination.

The Council/Office is responsible for coordination of federal environmental programs that involve more than one agency. For example, a Council Member is assigned to oversee the activities of the Interagency Task Force on Acid Precipitation (ITFAP).

C. Program Responsibilities

1. Oversight of Agency Implementation of the National Environmental Policy Act

a. Program Description

Oversight and implementation of the National Environmental Policy Act (NEPA) is the heart of all of the Council's activities; all of the Council's various functions, such as the Presidential advisory function and preparation of the annual Environmental Quality Report, are mandated by NEPA. However, the "NEPA" process, as it is commonly called, refers to the requirement in Section 102 of Title I of NEPA that all federal agencies assess the environmental impacts of proposed major federal actions significantly affecting the quality of the human environment.

Overseeing the implementation of this requirement has always been one of the agency's most important missions. Early in the history of NEPA, the Council issued guidelines to assist the agencies in beginning the environmental assessment process. Through several years of development, the process evolved into one in which agencies prepared environmental impact statements for major federal actions significantly affecting the quality of the human environment, and briefer environmental assessments for minor actions causing less environmental impact. However, the lack of a legally-binding, uniform set of regulations combined with increasing litigation led to production of massive environmental impact statements with scant readership, and many critical concerns about the effectiveness of the NEPA process. To address these concerns, the Council was directed by the President in 1977 to develop a set of binding regulations to implement the NEPA process which would reduce paperwork and delay, as well as improve the decision making process. Those regulations were developed in 1978 and became effective for all federal agencies in 1979. In 1981, the agency reviewed the regulations and determined that no major changes were needed in them. In 1983, CEQ issued guidance relating to six issues covered in the NEPA regulations: scoping, tiering, alternatives, EIS preparation by contractors, categorical exclusions, and adoption. In FY 1985, the Council proposed an amendment to one of the regulations which deals with incomplete or unavailable information in an environmental impact statement (EIS). Oversight and assistance in dealing with specific NEPA problems has continued throughout this period.

b. Program Accomplishments and Current Activities

During FY 1985, the Council focused on the controversy related to implementation of one of the NEPA regulations, 40 C.F.R. 1502.22, "Incomplete and Unavailable Information". The controversy about that regulation has centered around the requirement for agencies to prepare a "worst case analysis" when there is uncertainty or incomplete information about the significant adverse impacts of the agency's proposal, and the information cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known.

In December, 1984 the agency published an Advance Notice of Proposed Rulemaking (ANPRM) for 40 C.F.R. 1502.22, and stated that it was considering the need to amend the regulation [49 FR 50744 (1984)]. CEQ received a total of 161 responses to the ANPRM. On March 18, 1985, the Council held a meeting, open to the public, to discuss the comments received in response to the ANPRM.

Shortly after that meeting the Council voted to amend the regulation. The Council's proposed amendment to the regulation was published in the Federal Register for public comment on August 9, 1985 [50 FR 32234 (1985)]. (See Appendix A.) It would require an agency to include certain provisions in an environmental impact statement (EIS) when there is missing information, which, in the agency's judgment, is important to evaluating significant adverse impacts on the human environment that are reasonably foreseeable, and when the agency cannot obtain the information, either because of overall costs or because it is beyond the state of the art. These four provisions are: (1) to state that such information is missing; (2) to state the relevance of the information to evaluating significant adverse impacts on the human environment; (3) to summarize the existing credible scientific evidence which is relevant to evaluating the significant adverse impacts; and (4) to evaluate such evidence. The regulation also specifies that impacts which have a low probability of occurrence but potentially catastrophic consequences are to be included; provided they have credible scientific support, are not based on pure conjecture, and are within the rule of reason.

During the current fiscal year, the Council has been analyzing the 184 comments received in response to its proposal to amend 40 C.F.R. 1502.22. A majority of the commentators cited problems with the requirement to perform a "worst case analysis", although they acknowledged the need to address potential impacts in the face of missing information or uncertainty. Many of these writers had specific suggestions for improving the proposal. A minority of commentators wrote in support of the current regulation and strongly opposed the amendment.

The Council held a meeting, open to the public, on January 9, 1986, to discuss these comments. Shortly thereafter, the Council voted to proceed with a final amendment to the regulation. The Council is currently preparing the final preamble and amendment and anticipates final publication in spring of 1986.

Following this publication, the Council will conduct a conference to discuss implementation of the amended regulation. The conference will be jointly sponsored by CEQ, the U.S. Forest Service and possibly Yale University. It will include experts in risk analysis and representatives from federal agencies which are "users" of the regulation. These persons will develop broad guidance for evaluating significant adverse effects on the human environment when important information is incomplete or unavailable, including those which have a low probability of occurrence but are potentially catastrophic. These findings will then be published promptly in a form which will be useful to the Council/Office and to the federal agencies and other parties involved in the NEPA process.

The agency also plans to publish guidance regarding implementation of the newly amended 40 C.F.R. 1502.22. This guidance will replace a discussion of the current "worst case analysis" requirement in the CEQ document, "The Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 FR 18026 (1981). Such additional guidance by CEQ was requested by numerous federal agencies in their comments on the proposed amendment to this regulation.

The Council concluded its work in April, 1985, on the NEPA referral from the Department of the Interior concerning the Corps' proposed Tennessee-Tombigbee Waterway Wildlife Mitigation Plan (Alabama and Mississippi) by publishing its findings and recommendations in the Federal Register, as well as communicating them to the involved agencies [50 FR 12850 (1985)]. (See Appendix B.) The referral involved two basic issues: (1) in-kind replacement of land with special resources, and (2) the use of land on other projects for mitigating habitat losses on the Tennessee-Tombigbee. In regards to the first issue, the findings stated that the Council "believes that the bottomland hardwoods in the Southeast are of such importance as wildlife habitats and becoming so scarce, that the principle of full, in-kind replacement should override other considerations". The Council strongly recommended that "the Department of the Interior and the Corps of Engineers work out a mitigation plan that fully replaces the 34,000 acres of bottomland hardwoods lost, through a combination of management and acquisition (public or private) of bottomland and hardwood habitats". In regards to the second issue, the Council recommended that the Department of the Interior and the Corps of Engineers reach an agreement whereby management of lands on five existing developments could be used for credit on the Tennessee-Tombigbee project, consistent with the principle of in-kind replacement for bottomland hardwoods. The Council's guidance, translated into a specific acreage of acceptable mitigation lands, is under consideration in the Congress. The Senate Public Works Committee staff are drafting a proposal to amend the Water Development Act to authorize 88,000 acres of mitigation lands for the Tennessee-Tombigbee project, an acreage figure that most closely approximates the policy guidance of the Council.

On February 25, 1985, the Council also received a referral from the Environmental Protection Agency concerning a proposal by the Corps of Engineers to amend their agency's NEPA procedures. At the request of the Acting Assistant Secretary for the Department of the Army (Civil Works), resolution of the referral was postponed during FY 1985. No action was taken to implement the subject regulations during this period.

During FY 1986, the Council expects to actively work on the referral which is currently pending from the Environmental Protection Agency regarding the Army Corps of Engineers' proposal to amend its NEPA procedures. The proposed amendments raise significant questions dealing with the scope of a "federal" activity under NEPA, examination of alternatives when an applicant requests a permit from the Army Corps of Engineers, and other legal matters. We anticipate that resolution of these issues will be an intensive and time-consuming activity for the Council.

During FY 1985, the Council initiated a special study to analyze the referral process and how it has worked over the past twelve years. The project involved case studies, including numerous interviews, about twenty of the twenty-two referrals which the Council has received since the referral process was established in 1973. The study is the first compilation of factual materials about each of the past referrals and will provide the Council, the Congress, other agencies and the public with a record of how past referrals have been resolved. The findings were published in the 15th annual Environmental Quality Report as an appendix to the NEPA chapter. The study will also aid the Council in determining whether any modifications are needed in the current referral procedures. The study is scheduled for publication in FY 1986.

The NEPA chapters for the 1984 and 1985 annual Environmental Quality Reports were prepared by OEQ staff, and included the annual survey of all litigation filed against federal agencies containing a cause of action under NEPA. (See Appendix C.)

The Council continues to spend much time assisting federal and state agencies, and private citizens with a variety of requests for assistance and interpretation in specific situations involving the NEPA process. For example, during FY 1986 the Council:

1. Granted an emergency exemption to the U.S. Fish and Wildlife Service so that five California condors could be captured and brought into captivity, thus averting possible extinction of the species.
2. Requested that the Navy provide a longer notice period or extend the comment period for a series of scoping meetings to be held regarding the proposed Gulf Coast Strategic Homeporting Plan.
3. Resolved questions raised by the U.S. Forest Service and the Environmental Protection Agency regarding the public comment period and records of decision for legislative environmental impact statements.
4. Addressed the question of whether there is a distinction between the analysis of environmental impacts required for military property, as opposed to impacts on other property.
5. Responded to a state inquiry about the relationship between NEPA and the Toxic Substances Control Act in relation to a proposed facility which would handle PCBs.

This type of assistance and oversight, which is typically conducted on an informal basis, is a primary activity of the General Counsel's office.

During FY 1985, the Council approved amendments to agency NEPA procedures for the General Services Administration, the U.S. Forest Service, and the

Minerals Management Service. The Council expects FY 1986 reviews to include proposals from the Corps of Engineers, the Federal Communication Commission and the Veterans Administration, among other agencies.

During FY 1985, the Council updated and published three appendices to the NEPA regulations. Appendix I updates the Federal and Federal-State Agency NEPA contacts list; Appendix II updates the compilation of Federal and Federal-State Agencies with Jurisdiction by Law or Special Expertise on Environmental Quality Issues; and Appendix III reinstates the listing of Federal and Federal-State Agency Offices for Receiving and Commenting on Other Agencies' Environmental Documents [49 FR 49750 (1984)].

The Council received many visitors from foreign countries who were interested in learning about the implementation of the environmental assessment process, and who obtained much information and materials from the Council staff. During FY 1985, visitors were received from Japan, Australia (New South Wales, South Australia, and the federal government of Australia), Norway, and the Netherlands.

Already in FY 1986, government officials from Japan, Costa Rica, Italy, Germany and Finland have come to CEQ for information about the NEPA process.

In FY 1985, the Council hosted a meeting of the American and Japanese Co-Chairmen of the Environmental Assessment Project under the "Agreement Between the Government of the United States of America and the Government of Japan on Cooperation in the Field of Environmental Protection." This project is chaired on the American side by the General Counsel of CEQ and on the Japanese side by the Director of the Environmental Management Division, Planning and Coordination Bureau, of the Environment Agency of Japan. The Japanese Co-Chair has requested that the next project meeting be held as soon as possible in Japan. Given financial restraints, it is not certain when this project meeting will take place, but attempts are being made to arrange for the necessary travel funds in the later half of FY 1986.

The General Counsel of CEQ is also the Project Leader for Area XI, "Legal and Administrative Measures for Protecting Environmental Quality" under the Agreement on Cooperation in the Field of Environmental Protection between the United States and the Soviet Union. During FY 1986, the agency expects to host the head of the Department of Legal Problems of Environmental Protection, Institute of State and Law, Academy of Science of the U.S.S.R., for a period of up to 90 days. This individual will be studying the structure and philosophical basis of American environmental law in an appropriate academic institution in the Washington area. Under the Agreement, CEQ will be responsible for arranging his study, housing, and appropriate activities during this period.

EXECUTIVE ORDER 11644

In addition to its NEPA responsibilities, the General Counsel's Office handles interagency coordination responsibilities under Executive Orders pertaining to federal environmental programs. Executive Order 11644, as amended by Executive Order 11989, establishes policies and procedures for the use of off-road vehicles on public lands. It specifically affects lands under the control of the Department of Agriculture, Department of the Interior, Department of Defense, and the Tennessee Valley Authority. Each of these agencies is required to develop and issue regulations to provide for designation of specific areas in which off-road vehicles may be used and areas in which they may not be used. The respective agencies are required to provide for public information about these areas, as well as enforce compliance with the designations. Additionally, the agency head is required to close areas to off-road vehicle traffic if he determines that the use of these vehicles is causing considerable adverse impacts.

Under the Executive Order, the Council/Office is instructed to maintain a continuing review of the implementation of this Order. The agency has recently been approached with some complaints and concerns about implementation of the Order, and has begun a series of meetings with the land management agencies, user communities, and public interest organizations to review the effectiveness of the agencies' implementation of the Executive Order. Depending upon the Council's findings, it may make recommendations regarding this issue to the President's Commission on Americans Outdoors.

c. Proposed FY 1987 Activities

During FY 1987, the Council will attempt to respond to requests for assistance, interpretations and determinations in relation to specific NEPA problems in a more expeditious and comprehensive manner.

During FY 1987, CEQ will update and analyze information about state "little NEPA" statutes. The most recent information published by CEQ about state environmental assessment laws appeared in the annual Environmental Quality Report for 1979. The Report indicated that slightly over half of the states have a mandatory environmental assessment requirement similar to NEPA. However, we have no information about developments since that date. After this basic information is prepared, we would anticipate initiating detailed studies on the relationship between the implementation of NEPA and state "little NEPA" laws in at least three states. The Council will then recommend methods of meeting compliance with both the federal and state statutes with a minimum of duplication and paperwork, and disseminate these findings to the federal and state agencies involved in the NEPA process.

The Council anticipates convening a conference in Washington, D.C., for environmental review staff from all of the federal agencies. The purpose of the conference would be to inform CEQ of difficulties which the various environmental departments are having in implementing the NEPA process, and to share possible solutions to those problems.

During FY 1987, the General Counsel will continue to act as Project Leader for Area XI, "Legal and Administrative Measures for Protecting Environmental Quality," under the Agreement on Cooperation in the Field of Environmental Protection between the United States and the Soviet Union. That year, the U.S. delegation will receive a delegation from the U.S.S.R. for two weeks to exchange information and experience on (a) control of toxic substances; (b) risk assessment in setting standards; (c) environmental impact assessment, and (d) enforcement of environmental laws, including a specific case study from each side. The delegation visit will be preceded by an agreement about the agenda for the meeting, and an exchange of written papers on the substantive topics. Under the terms of the Agreement, the receiving side (U.S.) is obligated to pay for expenses of the five-to-seven member delegation while they are in the U.S. CEQ will seek financial contributions from other agencies represented on the American delegation and provide what funds it can to cover the anticipated costs.

The Council also expects to host the third meeting of the Environmental Impact Assessment Project under the Agreement between the United States and Japan in the Field of Environmental Protection in Washington, D.C. during FY 1987. Guidelines for the implementation of environmental assessment procedures were promulgated for the first time in Japan in August, 1984. This created much interest in Japan on the American experience in implementing NEPA and in the success of the project.

Additionally, the Council/Office will continue to follow developments in NEPA litigation, to be reported in the annual Environmental Quality Report for 1986, and to work with the Department of Justice on litigation involving NEPA claims.

EXECUTIVE ORDER 12114

Executive Order 12114 outlines policies and procedures for assessing the environmental effects of major actions of the federal government which take place abroad. The Executive Order provides for different types of procedures depending on (1) whether the action would take place in the global commons, in another country which is not a participant in the action; (2) whether the action involves a product which is strictly related by federal law because of toxic or radioactive impacts; or (3) whether it is an action affecting certain resources which can be designated for protection by the President or by international agreement. The Executive Order further provides for agencies to promulgate their own implementing procedures, and for consultation with CEQ about those procedures. With the improved level of funding, CEQ/OEQ will be able to review the agencies' implementation of these procedures and determine whether there are any problems which need to be resolved in regards to this process.

2. Assistance in Implementation of the Nuclear Waste Policy Act

a. Program Description

The Nuclear Waste Policy Act (NWPA)(P.L. 97-425) requires the Council on Environmental Quality to consult with the Department of Energy as it develops guidelines for the recommendation of sites as nuclear waste repositories. That Act also provides for the formal review and comments of the Council on the environmental impact statments prepared in the evaluation of potential sites.

b. Program Accomplishments and Current Activities

In FY 1985, the Council reviewed and commented upon the draft Project Decision Schedule for implementation of the Nuclear Waste Policy Act. The Project Decision Schedule identifies the key activities, decision points, and deadlines for federal agency actions required for the completion of a nuclear waste repository by 1998.

The first environmental impact statement (EIS) for a nuclear waste repository site will be issued in FY 1986. The Council will review and comment upon this EIS.

c. Proposed FY 1987 Activities

The Council will continue its statutory role under the Nuclear Waste Policy Act. During FY 1987, CEQ will be available to assist DOE in the resolution of environmental questions raised by the environmental impact statement for the candidate respository site. Studies on specific issues raised at that time may be conducted from the agency Management Fund.

3. Interagency Task Force on Acid Precipitation

a. Program Description

CEQ is responsible for assisting in the development and coordination of the Administration's acid precipitation research program through active participation in the Interagency Task Force on Acid Precipitation (ITFAP), and related policy activities.

The Council coordinates with the White House and the federal agencies concerned with acid precipitation to ensure that the federal research effort is responsive to major policy questions being asked by the Congress and other policy makers. A Member of the Council has been assigned responsibility for the conduct of agency activities in this area. CEQ Member Schafer serves as Executive Secretary of the Interagency Task Force on Acid Precipitation and as a member of the Joint Chairs Council in deliberations on acid precipitation research policy. CEQ meets on a continuing basis with those government agencies having responsibilities for acid precipitation-related programs. CEQ also houses the Office of the Director of Research for the Interagency Task Force on Acid Precipitation. The Task Force carries out the National Acid Precipitation Assessment Program with funds appropriated to individual agencies in accordance with a mutually agreed upon research plan.

b. Program Accomplishments and Current Activities

During FY 1985, the Council, in its capacity as Executive Secretary to the ITFAP, provided an increased level of direct support to the Task Force, while a new Director of Research was being recruited. This position was filled in September, 1985.

Also in FY 1985, the Council increased its level of administrative assistance to the ITFAP Program Coordination Office by assignment of a part-time permanent program analyst for several months. This is a part of CEQ's contribution to the research program, in accordance with the interagency memorandum of understanding. Finally, in FY 1985, CEQ provided legal and policy assistance to ITFAP in the drafting and execution of a contract with the National Academy of Sciences to provide a standing scientific committee to help the Task Force with specific technical issues concerning the National Acid Precipitation Assessment Program.

In FY 1986, CEQ is continuing to oversee the activities of the Task Force staff housed in its office complex and faciltate the financial management of interagency activities in support of the program. The agency acts as a member of the Joint Chairs Council and facilitates policy coordination with other involved entities for the Administration.

c. Proposed FY 1987 Activities

CEQ will continue to serve as the Executive Secretary of the Interagency Task Force on Acid Precipitation. A Member of the Council has been assigned responsibility for the conduct of CEQ's activities in this area. Administrative support to the ITFAP will also be provided by CEQ.

4. Coordination and Clearance of Proposed Legislation and Executive Orders

a. Program Description

CEQ/OEQ is asked by other executive agencies, Members of Congress, and the Office of Management and Budget (OMB) for advice on draft legislation affecting the environment. Legislative clearance is a valuable mechanism for the implementation of consistent environmental policy and preservation of the spirit of NEPA.

b. Program Accomplishments and Current Activities

The Council/Office comments regularly on proposed legislation, Executive Orders, enrolled bills and Congressional testimony which relate to environmental issues, and in particular, NEPA. Among the proposals which were commented on in FY 1985 were the following: USDA proposal to designate a segment of Black Creek as a Wild and Scenic River; testimony about a National Fish Hatchery System; the proposed Clifty Wilderness in Kentucky; a proposal to amend the Fish and Wildlife Coordination Act; testimony regarding the status of the Federal Energy Regulatory Commission's implementation of NEPA; a report on the Garrison Diversion Unit Commission recommendations; the Water Resources Development Act of 1985; the Metropolitan Washington Airports Transfer Act of 1985; the Marine Sanctuaries Amendments of 1984; the San Juan Basin Wilderness Protection Act of 1984; the Virginia Wilderness Act of 1984; the Wyoming Wilderness Act of 1984; and the Antarctic Marine Living Resources Convention Act of 1984.

During FY 1986, the agency has been actively involved in discussions regarding proposed legislation to reform the non-competitive oil and gas leasing program, and has also commented on such proposed legislation as the Surface Transportation Reauthorization Act of 1985, and a proposal to amend the Fish and Wildlife Coordination Act.

CEQ/OEQ has repeatedly opposed legislation which would provide for exemption from the procedural requirements of NEPA.

Other legislative proposals were reviewed and determined to be consistent with CEQ/OEQ implementing legislation.

c. Proposed FY 1986 Activities

The agency will continue to comment on proposed legislation, Executive Orders, enrolled bills, and testimony which relate to the environment, presented by executive agencies, Members of Congress, and OMB. CEQ/OEQ will anticipate conflicts between proposed legislation and NEPA, and attempt an early resolution of the matters.

III. Environmental Data Acquisition and Assessment

A. Basic Objectives

In order to meet its statutory responsibilities, the agency's basic environmental data acquisition and assessment objectives are:

1. Assist the Congress and other federal agencies in resolving problems associated with environmental monitoring, as identified in the 1980 interagency Task Force report, the 1983 and 1984 Congressional hearings, the 1986 Environmental Trends report, and other fora.
2. Explore innovative ways for coordinating the numerous environmental monitoring programs of the federal agencies, and for enhancing the ready availability of current environmental information.
3. Inform the Congress, the President and the public concerning the changing state of the environment over the past several years.

B. Organization and Resource Requirements

Funds in Thousands of Dollars

	FY 85 Actual	FY 86 Estimate	FY 86 Estimate Grm-Rudm	FY 87 Estimate	Difference 1986-1987
Appropriation	255	175	170	210	+40
Reappropriation	60	0	0	0	0
Work Year Utilization	2.5	2.5	2.0	3.0	+1.0
FTE Allocation	4.5	3.5	3.5	3.0	-.5

CEQ/OEQ proposes to allocate a total of 3.0 work years and $210,000 to achieve the environmental data acquisition and assessment objectives. Currently, the Council/Office must rely totally on other agencies that monitor environmental change for the data that must be used in the CEQ annual reports and for the periodic Environmental Trends reports. At the present staff levels, updated figures must be obtained on the basis of personal contacts each year. The increased funding will enable the agency to begin the process of establishing a procedure for automating the acquisition of revised information on a continuing basis. In addition, the staff assigned to this work in FY 1987 would be able to evaluate the scientific merit of specific environmental quality indicators that are used and to work with data-producing agencies to improve the nature of certain indicators that inadequately reflect environmental change. This type of capability must be greatly enhanced in order to bring about a level of consistency and quality control to the acquisition and production of environmental quality data. The additional resources will be used to establish a new position for an environmental specialist with technical expertise in environmental monitoring and data. This individual will manage agency activities for this program in close consultation with the Chairman.

The program responsibilities in this area are primarily assumed by the OEQ technical and administrative staff. A Council Member is assigned to oversee the activities of the environmental monitoring staff. The work effort is concentrated in technical assessment and administration.

C. Program Responsibilities

1. Improvement of Federal Data and Monitoring Capabilities

a. Program Description

Under NEPA and the Environmental Quality Improvement Act, the agency is required to assemble, analyze, or interpret authoritative information regarding the status of the environment or documenting ecological developments. The Council/Office uses this information to brief the President, the Executive Office, and the Congress about the condition of the environment. In keeping with this responsibility, CEQ/OEQ prepares reports on various subjects, in addition to the annual Environmental Quality Report, describing data and information on many aspects of the environment.

b. Program Accomplishments and Current Activities

CEQ/OEQ has a vital role as catalyst in the area of federal data and monitoring programs. Actual monitoring of environmental conditions and collection of data properly rests with the various line agencies. Of course, each line agency conducts environmental monitoring in a way consistent with its own mission and Congressional mandates. The Council/Office brings the agencies together to communicate what each is doing in areas of common interest, and utilizes the relevant information of the several agencies to produce a common document that reports on the overall condition of the environment.

Current agency activities have been focused upon two primary areas. One area is the technical responsibility associated with toxic substances and chemicals of environmental concern. The Chairman of CEQ serves as a joint chairman (along with the Administrator of EPA) of the Interagency Toxic Substances Data Committee (ITSDC). This Committee was established to improve coordination in the generation, sharing and management of information about chemical substance life cycles and effects upon the environment. The agency is also a statutory member of the Interagency Testing Committee (ITC). The ITC, as established under the Toxic Substances Control Act, is charged with recommending chemical substances to the EPA Administrator which should be given priority consideration for promulgating health and environmental testing rules. Representatives of CEQ/OEQ attend the meetings of these two committees on a regular basis.

The other primary area of activity relates to the improvement of environmental monitoring and data. In FY 1984, the Council/Office planned an interagency effort to update information about environmental data sources that are available, and to produce a 1986 Environmental Trends sourcebook. The interagency working group was established in late FY 1985, with membership from approximately 15 agencies. Multi-agency funding was begun and a support contract awarded at the end of the fiscal year.

The interagency working group is meeting regularly for planning and evaluation of draft products. A meeting of the Council under the Sunshine Act was held to keep the Council Members informed of the direction and content of the activity.

A support contract has been awarded to the NUS Corporation to conduct background studies and propose alternatives for organization and content of the report. The Statement of Work for this procurement is reproduced in Appendix E.

The support contractor is providing substantial technical background for decisions on what indicators of environmental quality are included in the report, how the data should be presented for most effective use by the informed public, what scientific basis exists for the indicators, and what sources exist for obtaining the necessary data.

The Council/Office had the central coordinating role in developing this report and co-sponsoring its initial publication in 1981. The revision of the report at five-year intervals was deemed a statistically meaningful time period for discernable trends to develop. Through the use of maps and charts, the report is designed to portray quantitatively, yet simply and effectively for the lay reader, the current conditions and trends in the quality of our environment.

The Interagency Working Group has selected the general environmental categories to be included in the Environmental Trends report. As of early January, 1986, the Contractor has begun the process of recommending specific indicators necessary for adequate reporting of environmental quality and environmental health. Completion of the report will be the result of sustained cooperation among professionals from several federal agencies. In addition, there is private sector interest in the printing and distribution of the report to the public.

As an important part of this activity, recommendations will be made for improvements in data and monitoring, based on deficiencies noted during the process of seeking and securing information.

In addition, the Council/Office has involvement, as requested, in Executive Office oversight reviews and studies of the environmental monitoring programs of various agencies for the purpose of assuring adequacy of environmental data for defined areas of special need.

c. Proposed FY 1987 Activities

The agency will continue to serve as the Co-Chair for the Interagency Toxic Substances Data Committee in FY 1987.

The Environmental Trends report is scheduled for completion by the beginning of FY 1987. The initial activity in the next fiscal year will be the distribution of the report.

An important emerging project for FY 1987 will be the solution of many of the problems identified during the development of the Environmental Trends report. This will involve the use of select interagency work groups assembled by CEQ/OEQ to work on the solution of specific problems, such as the development of key indicators or the implementation of coordination mechanisms. The Council/Office will play the role of catalyst in encouraging agencies to contribute to solutions, particularly in areas of research, monitoring and the construction of new environmental quality indicators.

2. Chemical Substances Information Network (CSIN)

a. Program Description

CEQ/OEQ provided oversight and support for a pilot program mandated by the Toxic Substances Control Act. This project, the Chemical Substance Information Network (CSIN), has been funded and supported through interagency agreements with the Council/Office.

CSIN is a sophisticated switching network which offers efficient and effective access to on-line information resources containing data relevant to chemical substances and other scientific disciplines and subject matters. The purposes of CSIN are twofold: (1) to meet the growing chemical data and information requirements of industry, academia, federal and state governments, public interest groups, and others, and (2) to reduce the burden on the private and public sector communities when responding to complex federal legislation oriented to chemical substances.

b. Program Accomplishments and Current Activities

The software technology for the CSIN Program was completed under contract in FY 1985. Software for both microcomputer and mainframe applications were transferred by interagency agreement to the National Technical Information Service (NTIS) in the Department of Commerce for sale to the public. Interested government agencies are provided access to an appropriate program.

In FY 1986, CEQ/OEQ will monitor the distribution and sale of the two CSIN software packages as provided by the interagency agreement with NTIS. All other activities will cease.

c. Proposed FY 1987 Activities

There are no activities planned for FY 1987.

BUDGET SUMMARY

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

RESOURCES AND PROGRAM SUMMARY

(Dollars in Thousands)

Obligations:	FY 1985 Actual	FY 1986 Estimate	FY 1986 Estimate Under P.L. 99-177	FY 1987 Estimate
Regular Appropriation	$700	700	670	820
Reappropriation	175	0	0	0
Permanent Positions	13	13	13	13
Compensable Work Years	11	11	9.5	13

EXPLANATION: Provides for analysis of important environmental conditions and trends; review and appraisal of Federal Government programs impacting upon the environment; recommending policies for protecting and improving the quality of the environment; assisting in coordinating Federal environmental programs involving more than one agency; assisting in preparation of the President's Annual Report to the Congress; and undertaking special studies and analyses relating to environmental issues.

RESOURCE OBLIGATION

By Dollars (in Thousands) and Work Years*

	FY 85 Actual	FY 86 Estimate	FY 86 Estimate Grm-Rudm	FY 87 Estimate	Difference** 1986-1987
Environmental Policy Analysis and Development (Presidential Advisor)					
Appropriation	272	275	260	310	+50
Reappropriation***	100	0	0	0	0
Work Year Utilization	5.0	5.0	4.5	5.5	+1.0
FTE Allocation	5.0	5.0	5.0	5.5	+.5
Interagency Coordination of Environmental Programs (NEPA Oversight)					
Appropriation	173	250	240	300	+60
Reappropriation***	15	0	0	0	0
Work Year Utilization	3.5	3.5	3.0	4.5	+1.5
FTE Allocation	3.5	4.5	4.5	4.5	0
Environmental Data Acquisition & Assessment					
Appropriation	255	175	170	210	+40
Reappropriation***	60	0	0	0	0
Work Year Utilization	2.5	2.5	2.0	3.0	+1.0
FTE Allocation	4.5	3.5	3.5	3.0	-.5
TOTALS					
Appropriations	700	700	670	820	+150
Reappropriations***	175	0	0	0	0
TOTAL	875	700	670	820	+150
Work Year Utilization	11.0	11.0	9.5	13.0	+3.5
FTE Ceiling	13.0	13.0	13.0	13.0	0

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*Personnel levels are expressed in terms of FTE allocation (based on a ceiling of 13 positions) and actual work years utilized. In fiscal year 1985 and 1986, funding was not available to fill the 13 FTE positions authorized.

**The difference in budget authority between fiscal years 1986 and 1987 reflects actual funding available after Gramm-Rudman reductions.

***In FY 1985, CEQ/OEQ received a Reappropriation in the amount of $175,000. These funds were derived out of savings from a contract study to consider and define a National Center for Water Resources Research, et. al. (Public Law 98-181). The purpose of the Reappropriation was to expand NEPA oversight activities and to strengthen the technical and scientific expertise of CEQ/OEQ.

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

PROGRAM AND FINANCING
(Dollars in thousands)

Program by activities:	1985 actual	1986 est.	1987 est.
Direct program: Environmental policy development and program evaluation	871	700	820
Reimbursable program: Environmental policy studies	75	...	...
Total obligations	946	700	820
Financing:			
Offsetting collections from: Federal funds	-75	...	...
Unobligated balance available, start of year	-175	...	...
Unobligated balance lapsing	5	...	...
Budget authority (appropriation)	700	700	820

Relation of obligations to outlays:			
Obligations incurred, net	870	700	820
Obligated balance, start of year	1,627	638	35
Obligated balance, end of year	-628	-35	-41
Adjustments in expired accounts	-29	...	...
Outlays	1,830	1,303	814

REDUCTION PURSUANT TO PUBLIC LAW 99-177

PROGRAM AND FINANCING
(Dollars in thousands)

Program by activities:			
Total obligations	...	-30	...
Financing:			
Budget authority (appropriation)	...	-30	...

Relation of obligations to outlays:			
Obligations incurred, net	...	-30	...
Obligated balance, start of year	...	...	-1
Obligated balance, end of year	...	1	...
Outlays	...	-29	-1

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS

Enacted/requested:			
Budget authority	700	700	820
Outlays	1,830	1,303	814
Reduction pursuant to P.L. 99-177:			
Budget authority	...	-30	...
Outlays	...	-29	-1
Total:			
Budget authority	...	670	820
Outlays	...	1,274	813

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

OBJECT CLASSIFICATION
(Dollars in thousands)

	1985 actual	1986 est	1986 est under Gramm-Rudman	1987 est
Direct obligations:				
Personnel compensation: Full time permanent	640	495	470	579
Personnel benefits:				
Civilian	47	50	45	53
Benefits to former personnel	12	...	...	...
Travel and transportation of persons	11	13	13	15
Transportation of things	...	2	2	3
Standard level user charges	73	75	75	66
Communications, utilities, and other rent	28	37	37	36
Printing and reproduction	46	23	23	32
Other Services	10	2	2	13
Supplies and materials	4	3	3	13
Equipment	...	...	...	10
Subtotal, direct obligations	871	700	670	820
Reimbursable obligations	75	...	...	...
Total obligations	946	700	670	820

NOTE: The agency travel request for FY 1987 is $15,500. For purposes of consistency with the Budget Appendix, this figure has been rounded to $15,000.

EXPLANATION OF DISTRIBUTION BY OBJECTS FOR FY 1987

11 Personnel Compensation and Staffing --- $579,000. For 13 work years distributed as follows:

	FY 1985	FY 1986	FY 1987
Total Work-years	11	11	13

12 Personnel Benefits --- $53,000. Includes $27,000 for direct contribution to Retirement Fund; $11,600 for health and life insurance; $8,400 for OASDI portion of FICA; and $6,000 for the medicare portion of FICA.

21 Travel and Transportation of Persons --- $15,500. For Member and staff travel.

22 Transportation of Things --- $3,000. For Federal Express and other commercial carriers.

23 Rents, Communications, and Utilities --- $102,000. Includes $9,000 for postage and fees, $27,000 for communication services, and $66,000 for standard level user charges paid to Federal Buildings Fund (GSA).

24 Printing and Reproduction --- $32,000. Includes $25,000 for the Annual Report to Congress, and $7,000 for general printing.

25 Other Services --- $12,500. Includes $7,000 for equipment maintenance and $5,500 for payments to commercial contractors.

26 Supplies and Materials --- $13,000. For office supplies and subscriptions to publications.

31 Equipment --- $10,000. For equipment and carpeting.

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

PERSONNEL SUMMARY

	1985 Actual	1986 Estimate	1986 Estimate Under P.L. 99-177	1987 Estimate
Total number of full-time permanent positions	13	13	13	13
Total compensable workyears	11	11	9.5	13

NOTE: These figures differ from those reported in the Budget Appendix. That table represents an estimate which was made at an earlier time.

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

ANALYSIS OF AUTHORIZED LEVEL FOR FISCAL YEAR 1987

(Dollars in thousands)

	Permanent Positions	Total Work Years	Amount
FY 1986 Budget Authority	13	11	700
FY '86 Budget Authority under P.L. 99-177	13	9.5	670
FY 1987 Budget Authority Estimates	13	13	820
TOTAL BUDGET AUTHORITY CHANGE FY 1986 to FY 1987	0	+2	+120
FY 1986 under P.L. 99-177 to FY 1987	0	+3.5	+150

EMPLOYMENT BY CATEGORY

	Number
Chairman	1
Council Members	2
Substantive Staff Members	3
Support & Clerical	3-1/2
TOTAL WORK YEARS	9.5

OFFICE OF ENVIRONMENTAL QUALITY MANAGEMENT FUND

I. PROGRAM DESCRIPTION

The agency acts as the environmental coordinator, mediator, and convener for the Executive Branch of the Federal Government. In this capacity, the Council/Office conducts various activities in cooperation with other agencies to develop and implement environmental policies for the Administration. To facilitate this function, the Office of Environmental Quality has been granted statutory authority for a Management Fund account* to finance "(1) study contracts that are jointly sponsored by the Office and one or more other federal agencies; and (2) federal interagency environmental projects (including task forces) in which the Office participates." (Public Law 98-581) The Fund was established pursuant to the most recent Reauthorization Act for OEQ and began actual operation in Fiscal Year 1985. This new account replaced a Consolidated Working Fund, which had previously been granted on an administrative basis to the agency by the Office of Management and Budget. The Management Fund is more suitable administratively for conducting interagency studies, projects, and task forces. (The differences in structural characteristics and operational procedures between Management Funds and Consolidated Working Funds were explained in detail in the FY 1986 Budget Request).

A. BASIC OBJECTIVES

The Management Fund is indispensable to the agency in fulfilling its legislative mandates. It provides CEQ/OEQ with rapid access under contract to a wide latitude of specialized expertise not available in its small staff. Thus, the Council/Office can address a broad variety of emerging issues in a cost-effective manner. Secondly, a Management Fund facilitates the participation of other federal agencies in joint projects about overlapping responsibilities. As a result, CEQ/OEQ is able to more effectively exercise its role as the environmental coordinator for the Executive Branch. The Fund permits agencies to combine financial resources in cooperative projects of mutual benefit. A Management Fund enables a small agency to respond rapidly to developing concerns and bring various agencies together in areas of common interest.

Finally, the Management Fund provides a greater degree of accountability for management of financial resources. A Management Fund is required to publish internal policies and procedures to govern its operation. In addition, the annual budget estimates for the Management Fund are presented as a separate schedule in the Appendix for the Budget of the United States.

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* A Management Fund is an account "(a)uthorized by law to credit collections from two or more appropriations in order to finance a common purpose or project not involving a continuing cycle of business-type operations." Terms Used in the Budgetary Process, GAO, 1977, p. 16.

B. ORGANIZATION AND RESOURCES

For accounting and budget presentation purposes, the Management Fund is divided into two Program Divisions. Specifically, the divisions are as follows:

Division 100 --	Environmental Policy Development Studies and Projects (Studies)
Division 200 --	Interagency Task Force on Acid Precipitation (Acid Rain)

The program expenses of task force activities are different from those of contract studies. A task force operates as an independent accounting entity from member agencies. The agencies contribute funds and detail personnel to support task force activities. The task force pays for its administrative costs as well as its contract expenses from the Management Fund account. Hence, its operating budget includes all object class categories, except for personnel and official representation. By contrast, all expenses for study contracts are limited to the "other services" and "travel" object classes. (Contract travel is confined to invitational travel for vendors and project participants; no agency employee travel is financed from the Management Fund.)

All work financed from the Management Fund supports one or more of the three major agency programs: Environmental Policy Analysis and Development, Interagency Coordination of Environmental Quality Programs, and Environmental Data Acquisition and Assessment. All proposed projects are first reviewed for scientific merit and technical validity by Member William L. Mills, a Ph.D. scientist. The Director of OEQ, A. Alan Hill, then considers any recommendation for approval, taking into account the project's potential to contribute to agency program goals. Those proposals with interdisciplinary, international, or intergovernmental elements are more attractive, as are projects in which agency involvement provides enhanced public participation, objectivity, independence, or technical expertise. After a contract is awarded, CEQ/OEQ staff review all reports and recommendations of each contract study and provide comments to cosponsoring agencies.

The Council/Office contributes technical evaluation, administrative assistance, and (on occasion) limited financial support for project and task force activities conducted from the Management Fund. The agency participates by offering policy oversight by a Council Member or staff member (as designated by the Director), contract support by the Deputy General Counsel, accounting assistance by the administrative staff, legal review by the General Counsel, secretarial backup, and meeting facilities for conferences and contract work. An agency official is named as the Contracting Officer's Technical Representative to provide overall contract management. When it is able, the Council/Office transfers funds from its regular appropriation account into the Management Fund. This is accomplished by written request to the Financial Management Division within the Executive Office of the President.

Other agencies provide primary financial resources to the Management Fund account on a project basis by way of interagency agreement with CEQ/OEQ. The cosponsoring agency also names a project officer to perform technical evaluations and assist CEQ/OEQ in contract management. Participating agencies on task forces detail employees to serve as staff members.

Policy studies are difficult to budget on an annual basis in advance because of the nature of the work being done. There are two reasons for this. First, the vast majority of the money is derived by contributions from other agencies. Funds are received by interagency transfer throughout the fiscal year. The initiation of a special study or project is dependent upon fund availability and relative priority of the subject matter. Second, the work revolves around emerging issues and new developments not known beforehand. As such, there is not sufficient advance notice for normal budgeting on a project basis. The plans for individual studies and projects are developed with a three- to six-month lead time, on average. Indeed, one of the purposes of the Management Fund is to allow the government to respond rapidly to developing environmental concerns.

However, it is possible to estimate projected contract activity based on historical precedents and general program goals. Under this Administration, the total level of funding for 25 to 35 annual policy studies has ranged between $1,000,000 and $1,500,000 per year. Because of reduced discretionary funding availability under sequestered budgets, the level of contract activity is expected to fall below current levels in FY 1986 and to drop again in FY 1987. See the Finance Summary for a detailed estimate.

By contrast, the Interagency Task Force on Acid Precipitation, which is financed from the Management Fund, must budget its operations for the coming year as if it were an agency. Funding is somewhat easier to obtain since various agencies are required under the Energy Security Act of 1980 to participate in Task Force programs. The Task Force has operating expenses like an agency and must anticipate its needs far in advance. Studies, on the other hand, are discretionary and must be balanced against other priorities.

C. PROGRAM ACTIVITIES

1. Assist the President With Environmental Policy Development and Implementation

a. Program Description

The agency conducts studies and administers interagency task forces from its Management Fund to fulfill its statutory responsibilities of:

- Developing and recommending to the President national policies to promote the improvement of environmental quality (NEPA, 42 USC 4344(4)).
- Providing advice and assistance to the President in achieving international cooperation for dealing with environmental problems (Executive Order 11514, Section 3g).
- Conducting studies on behalf of the President to provide data and substantive information for the annual Environmental Quality Report (NEPA 42 USC 4341, 4344(1)).

b. Program Accomplishments and Current Activities

The highlight of contract studies from the Management Fund during fiscal years 1985 and 1986 has been the Conference on Long-Term Environmental Research and Development. In March 1985, CEQ/OEQ published its Report on Long-Term Environmental Research and Development. CEQ/OEQ is taking steps to insure that the recommendations are considered by appropriate agencies and organizations, and has made copies widely available. This year, the agency has initiated three contract actions for the purpose of implementing the specific recommendations of the Conference.

First, the Council/Office is sponsoring a conference to identify research that should be conducted at Superfund and hazardous waste clean-up sites to develop a better understanding of the soil/water/air/hazardous waste interface. A report will be developed exploring research needs, opportunities, and general design criteria at federally funded Superfund and Hazardous waste clean-up sites. Experts from a broad spectrum of environmental sciences are involved in the preparation of the report.

Second, the agency is following-up on another recommendation contained in the report by holding a conference on health effects from multiple routes of exposure to toxic chemicals. The conference will seek to identify when such multiple routes of exposure may become a problem for a particular chemical or groups of chemicals, and what are the implications of these findings for further research related to prevention and control.

A third follow-up activity relates to risk assessment and particularly to development of curricular materials for environmental scientists and managers. As risk assessment has become an important aspect of environmental management, there has developed a corresponding need for an understanding of risk assessment to become part of the educational process. CEQ/OEQ has contracted for the preparation of guidance in this regard during FY 1986. The agency is also involved with the National Science Foundation's study of the scientific bases of risk assessment assumptions. This study focuses on the recommendation in the Report that dealt with the need for a better understanding of the principles used in the selection of risk assessment priorities.

A second important activity of the Management Fund is the Interagency Task Force on Acid Precipitation (ITFAP).

The purpose of the National Acid Precipitation Assessment Program is to increase our understanding of the causes and effects of acid precipitation. The National Program includes research, monitoring and assessment activities that emphasize the timely development of a firmer scientific basis for decision making. This program of policy-oriented research issues Annual Reports describing research progress and the current state of knowledge about acid precipitation and its implications.

The Council acts as the Executive Secretary for the Task Force. In this capacity, the agency provides office facilities and administrative services for ITFAP. Except for personnel, all program activities are funded out of the

OEQ Management Fund. Budget projections for the Task Force are provided in the Finance Summary for the Management Fund. Program accomplishments and plans are discussed in detail in the agency Budget Justification.

In addition, several studies have been prepared for the purpose of conducting independent peer review of scientific issues for other environmental agencies, principally EPA. CEQ's involvement has assured that the analytical work has been conducted in an independent manner.

Examples of such studies conducted in FY 1985 and 1986 include work on user fees for pesticide registrants, quantitative risk assessment, EPA compliance with the Endangered Species Act, and hazardous waste enforcement training.

c. Proposed FY 1987 Activities

The agency anticipates additional contract work in FY 1987 to follow-up on the Conference on Long-Term Environmental Research and Development. The Council will continue to support the Interagency Task Force on Acid Precipitation from its Management Fund Account. Additional peer review work with other environmental agencies is planned for next year.

2. Coordinate Environmental Programs Among Federal Agencies

a. Program Description

The agency conducts contract studies and interagency projects from its Management Fund to fulfill its statutory responsibilities of:

- o Assisting federal agencies in appraising the effectiveness of existing and proposed environmental programs, policies, facilities, and activities (Environmental Quality Improvement Act, 42 USC 4372(d)(2)).
- o Assisting in coordinating environmental programs and activities among federal agencies (Environmental Quality Improvement Act, 42 USC 4372 (d)(5)).
- o Overseeing the implementation of environmental review regulations by other federal agencies (Executive Order 11514, Section 3h).

b. Program Accomplishments and Current Activities

The agency has been examining environmental referrals under contract from the Management Fund. This work relates to the National Environmental Policy Act, which established procedures for referring to the Council federal interagency disagreements concerning proposed major federal actions which might cause unsatisfactory environmental effects. Such matters are generally referred to the Council after preparation of an environmental impact statement, and must be referred by the head of a department or agency. Since the existence of the referral process in 1973, there have 22 federal proposals referred to CEQ.

CEQ has commissioned the Environmental Law Institute to conduct a thorough analysis of the referral process. The study has two primary objectives: one, to develop a coherent base of historical information about past referrals; and two, to analyze the effectiveness of the referral process. The study is designed to give the Council a means of assessing the strengths and weaknesses of the current procedures, and whether any changes are needed.

In a second major project, CEQ has been assisting EPA with its pilot program on regulatory negotiation. This joint project involves a study of the usefulness of all-party, face-to-face negotiations as a supplement to our current system of regulatory development. The project's specific purpose was to investigate:

- o the value of developing regulations by negotiation;
- o the types of regulations which are most appropriate for this process; and
- o the procedures and circumstances which best foster negotiations.

In short, the project was initiated to find a better way to proceed -- for at least some of the 200 to 250 environmental regulations under development at any time.

EPA involved the Council on Environmental Quality in this project because of its expertise with environmental mediation and its objectivity in administration of contracts as a disinterested third party.

The goal of each negotiation is to reach a consensus on which to base a Notice of Proposed Rulemaking. The government's promise is to use any consensus -- within its statutory authority -- as the basis of the proposal.

All negotiations occur at the pre-proposal stage and are conducted under federally chartered Advisory Committees. Once a regulation is proposed, all normal Administrative Procedure Act and other procedural requirements apply.

A senior official selected by the lead office acts as the government's chief negotiator and as its party-at-interest. Parties representing legitimate and definable interests in the regulated community, environmental groups, and other affected stakeholders negotiate on behalf of their constituencies.

A neutral third party chairs the negotiations, keeps the process moving smoothly, and assists in resolving disputes. Generally, outside contractors are selected to act as conveners and facilitators.

When the project is complete, a final report is issued to indicate what was learned, and any recommended changes in negotiation procedures.

In addition to providing contract assistance, the agency has detailed its Administrative Officer to EPA to assist in logistical activities. The Council is being reimbursed for the personnel costs. The Administrative officer has moved physically into an EPA office.

c. Proposed FY 1987 Activities

The agency will consider follow-up work to the current contract efforts for the next fiscal year.

3. Collect, Analyze and Interpret Data and Information on Environmental Quality

a. Program Description

The agency conducts contract studies and interagency projects from its Management Fund to fulfill its statutory responsibilities of:

- Gathering timely and authoritative information concerning the conditions and trends in the quality of the environment (NEPA, 42 USC 4344(2)).
- Assisting other federal agencies in the development of environmental quality criteria and standards (Environmental Quality Improvement Act, 42 USC 4372(d)(6)).
- Reviewing the adequacy of existing environmental monitoring systems (Environmental Quality Improvement Act, 42 USC 4372(d)(3)).
- Documenting and defining changes in the natural environment (NEPA, 42 USC 4344(6)).

b. Program Accomplishments and Current Activities

Management Fund activity for the Data Acquisition and Assessment Program is focused on the Environmental Trends report. The development of the Environmental Trends report will be the primary responsibility of CEQ, guided by an interagency working group composed of representatives from approximately 15 federal agencies. The basic organizational/administrative staff work will be handled within CEQ. Agencies will provide technical oversight through the working group, technical assistance in the acquisition of data, in-kind assistance for specific portions of producing the report, and funding for a support contract.

The Contractor, the NUS Corporation, will propose alternative categorizations of the environment and appropriate indicators for each. The interagency working group will make decisions on the basis of the background information provided by NUS. It was intended that NUS also obtain data, prepare graphics and maps, and prepare the report in camera-ready format. However, these activities likely will be shifted to the agencies as a portion of their conributions to the project.

In FY 1985, the agency completed CSIN program activities from the Management Fund. This is discussed in detail in the Budget Justification.

c. Proposed FY 1987 Activities

In FY 1987, the agency may initiate a contract effort to develop a method for obtaining regularized updating of environmental quality data from the various agencies that produce it.

II. PROGRAM REPORT ON MANAGEMENT IMPROVEMENTS

The agency is constantly reviewing its procedures and contract documents in order to assess compliance with procurement regulations, enhance competition, and improve vendor performance. In fiscal year 1985, the agency helped the Office of Administration develop a "fast track" procedure to begin a procurement while funds are being transferred to the Management Fund. This is intended to provide the additional time needed for full and open competition of contract studies when delay is anticipated from a pending interagency agreement. The new procedure allows the agency to publish a notice of a competitive solicitation before the IAG is received, based on a memorandum indicating financial resources have been identified. (If funds are not received by the Request for Proposal release date, the solicitation is cancelled by the Contracting Officer.) This procedure can accelerate bidding by six weeks or more. The procedure is an example of cooperation between the agency and its Contracts and Financial Management offices. Other agencies within the Executive Office of the President are able to use this administrative breakthrough.

During the 1986 fiscal year, OEQ/CEQ has developed indefinite quantity contracts for particular areas of substantive interest. "An indefinite-quantity contract provides for an indefinite quantity, within stated limits, of specific . . . services to be furnished during a fixed period, with deliveries to be scheduled by placing orders with the contractor." (Federal Acquisition Regulation, Section 16.504) The contract itself for work in a defined area is competitively bid. However, each study under the contract about a particular aspect of the general subject matter is initiated by making an assignment to a contract holder (without competition). Contracts are currently being competed for three FY 1986 topics: (1) potentially hazardous substances, such as pesticides, toxic substances, hazardous waste, nuclear waste, and radiation; (2) environmental information management and data analysis; and (3) the regulatory negotiation project. These competitively bid contracts will allow rapid initiation of a study on a given topic. The indefinite quantity contracts are appropriate for a Management Fund because of the inherent delay in transferring funds. This mechanism also complements the Council's statutory responsibility to provide "timely and authoritative information concerning the conditions and trends in the quality of the environment. . . ." (National Environmental Policy Act, 42 USC 4344(2))

During FY 1987, the agency plans to convene an informal project planning group to select and arrange for interagency studies and projects. The group will be composed of interested officials from various federal departments. The intent is to facilitate efficient funding for projects, to anticipate emerging problems sooner, to develop more comprehensive recommendations based on study results, and to discuss ways to more effectively implement needed improvements in environmental policies and activities.

OFFICE OF ENVIRONMENTAL QUALITY MANAGEMENT FUND ACCOUNT

FINANCE SUMMARY

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY MANAGEMENT FUND

(Dollars in thousands)

Program by activities:	1985 actual	1986 est	1987 est
Total obligations (object class 25.0)	1,940	1,352	1,087
Financing			
Offsetting collections from: Federal funds	-2,094	-1,352	-1,087
Unobligated balance available, start of year	...	-154	-154
Unobligated balance available, end of year	154	154	154
Budget authority (appropriation)	...	...	...
Relation of obligations to outlays:			
Obligations incurred, net	-154	...	...
Obligated balance, start of year	...	1,085	...
Obligated balance, end of year	-1,085	...	...
Outlays	-1,239	1,085	...

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY
MANAGEMENT FUND
RESOURCE OBLIGATIONS
FY 1985

DIVISION 100
ENVIRONMENTAL POLICY DEVELOPMENT STUDIES AND PROJECTS

RESOURCES	
IAGs Received	$1,556,335
CEQ Transfers	8,200
Total Resources	1,564,535
OBLIGATIONS	
Contracts	1,339,309
Purchase Orders	178,091
Other -- Transfer to DOE	15,000
Total Obligations	1,532,400
Unobligated Balance Carried Forward to FY '86	32,135

DIVISION 200
NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM

RESOURCES	
IAGs Received	269,000
CEQ Transfers	10,000
Total Resources	279,000
OBLIGATIONS	
Contracts	36,000
Travel	26,000
Transport of Things	7,000
SLUC	25,000
Other Rent/Comm/Util	15,000
Printing	23,000
Other Services (Commercial)	10,000
Supplies & Materials	7,000
Equipment	6,000
Total Obligations	155,000
Unobligated Balance Lapsing	6,000
Unobligated Balance Carried Forward to FY '86	118,000

DIVISION 300
CHEMICAL SUBSTANCES INFORMATION NETWORK

RESOURCES	
IAGs Received	250,000
CEQ Transfers	0
Total Resources	250,000
OBLIGATIONS	
Contracts	250,000
Purchase Orders	0
Other	0
Total Obligations	250,000
Unobligated Balance Carried Forward to FY '86	0

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY MANAGEMENT FUND
RESOURCE OBLIGATIONS
FY 1986 (as of 01-31-86)

DIVISION 100
ENVIRONMENTAL POLICY DEVELOPMENT STUDIES AND PROJECTS

RESOURCES	
Unobligated Balance Carried Forward from FY '85	$ 32,135
IAGs Received	293,298
CEQ Transfers	0
Total Resources	325,433
OBLIGATIONS	
Contracts	214,962
Purchase Orders	36,479
Other	0
Total Obligations	251,441
Unobligated Balance	73,992

DIVISION 200
NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM

RESOURCES	
Unobligated Balance Carried Forward from FY '85	118,000
IAGs Received	216,000
CEQ Tranfers	0
Total Resources	334,000
OBLIGATIONS	
Contracts	0
Travel	12,500
Transport of Things	1,800
SLUC	12,750
Other Rent/Comm/Util	4,375
Printing	0
Other Services (Commercial)	3,000
Supplies & Materials	550
Equipment	0
Total Obligations	34,975
Unobligated Balance	299,025

DIVISION 300
CHEMICAL SUBSTANCES INFORMATION NETWORK

Program was completed September 30, 1985.

TUESDAY, MARCH 18, 1986.

ENVIRONMENTAL PROTECTION AGENCY

WITNESSES

A. JAMES BARNES, DEPUTY ADMINISTRATOR

HOWARD M. MESSNER, ASSISTANT ADMINISTRATOR FOR ADMINISTRATION AND RESOURCES MANAGEMENT

RICHARD H. MAYS, ACTING ASSISTANT ADMINISTRATOR FOR ENFORCEMENT AND COMPLIANCE MONITORING

FRANCIS S. BLAKE, GENERAL COUNSEL

MILTON RUSSELL, ASSISTANT ADMINISTRATOR FOR POLICY, PLANNING, AND EVALUATION

JENNIFER JOY MANSON, ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS

JOHN C. MARTIN, INSPECTOR GENERAL

LAWRENCE J. JENSEN, ASSISTANT ADMINISTRATOR FOR WATER

J. WINSTON PORTER, ASSISTANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE

J. CRAIG POTTER, ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION

JOHN A. MOORE, ASSISTANT ADMINISTRATOR FOR PESTICIDES AND TOXIC SUBSTANCES

DONALD J. EHRETH, ACTING ASSISTANT ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT

C. MORGAN KINGHORN, COMPTROLLER

FITZHUGH GREEN, ASSOCIATE ADMINISTRATOR FOR INTERNATIONAL AFFAIRS

COURTNEY RIORDAN, DIRECTOR, OFFICE OF ACID DEPOSITION, ENVIRONMENTAL MONITORING, AND QUALITY ASSURANCE, OFFICE OF RESEARCH AND DEVELOPMENT

CYNTHIA DOUGHERTY, DIRECTOR, RESOURCE MANAGEMENT AND ADMINISTRATION OFFICE, OFFICE OF WATER

INTRODUCTIONS

Mr. BOLAND. The Committee will come to order.

This afternoon we have the Environmental Protection Agency before us. We will start with the water program. Administrator Lee Thomas needed to attend the Superfund conference this afternoon and we were happy to let him go, because of the critical situation with Superfund.

In return for our generosity, he promised to bring us a final agreement tomorrow morning on a good, long-term authorization bill.

So we will hold general questions for Mr. Thomas until tomorrow. We are delighted to welcome all of you here. A number of you have been here before.

You were previously the General Counsel, right, Jim?

Mr. BARNES. That is correct, and last year I had just become the Deputy Administrator.

Mr. BOLAND. How are you enjoying the new position?

Mr. BARNES. It is challenging. Usually without a dull moment.

Mr. BOLAND. More controversial. Because when you were the General Counsel, you made the ruling, and that was it—nobody disputed you.

Mr. BARNES. Well, rarely, yes.

Mr. **Boland**. Howard Messner has been here before.

Mr. **Messner**. Yes, sir.

Mr. **Boland**. Glad to have you again.

Mr. **Messner**. Thank you, Mr. Chairman.

Mr. **Boland**. How about Richard Mays?

Mr. **Mays**. Here.

Mr. **Boland**. You are new.

Mr. **Mays**. I am serving in an acting capacity as Acting Assistant Administrator.

Mr. **Boland**. You are in charge of enforcement.

Mr. **Mays**. Yes, sir.

Mr. **Boland**. Are you doing any now?

Mr. **Mays**. Yes, sir. We certainly are. Be glad to tell you about it.

Mr. **Boland**. We will have a few questions about what is happening with respect to enforcement. Win Porter, where are you?

Mr. **Porter**. Right here.

Mr. **Boland**. You have got one of the nicest jobs, the least controversial. He is in charge of the Superfund and RCRA, too.

Larry Jensen, where did you come from? I haven't seen you before.

Mr. **Jensen**. This is my first appearance here. I worked in the Department of Interior prior to this.

Mr. **Boland**. Okay. We are glad to have you. Where is Craig Potter?

Mr. **Potter**. Right here.

Mr. **Boland**. You look familiar.

Mr. **Potter**. I probably have seen you.

Mr. **Boland**. You feel better on this side of the building?

Mr. **Potter**. I think I do today, yes, sir.

Mr. **Boland**. Craig had been with the Transportation Subcommittee on the Senate side with Senator McClure?

Mr. **Potter**. Yes, sir.

Mr. **Boland**. And Don Ehreth?

Mr. **Ehreth**. Yes, sir. I was the Deputy to the Assistant Administrator for Research and Development. I was here a couple times as back up to him.

Mr. **Boland**. Joy Manson. Are you new?

Ms. **Manson**. Yes, sir, I am, also. I was confirmed in October.

Mr. **Boland**. You have never been here before?

Ms. **Manson**. I worked on the Senate side.

Mr. **Boland**. You did? I see the Senate has done well, hasn't it? Are you bringing some expertise to this agency now?

Mr. **Potter**. We are going to try, Mr. Chairman.

Mr. **Boland**. And Morgan Kinghorn. You always sit at the front of the table. Actually, he is really one of our favorite budget people. He is comptroller for the EPA, how long now?

Mr. **Kinghorn**. Six years.

Mr. **Boland**. We are delighted to learn that you have received the Donald Scantlebury Memorial award for outstanding financial management which is given to someone in the Federal establishment and I think also in state and local government.

Who in the world was Donald Scantlebury?

Mr. **Kinghorn**. He was Director of Financial and General Management.

Mr. **Boland**. He must have been a good one.

Mr. **Kinghorn**. He was.

Mr. **Boland**. Did he teach you?

Mr. **Kinghorn**. He was a little before my time.

WATER QUALITY PROGRAM

Mr. **Boland**. Now that you have got that award, there better not be any errors in this justification or I won't be bragging about you again.

We have a couple of general questions and then we will move into the justifications.

We will be racing through this during the next couple of days and hopefully we can complete EPA's hearings tomorrow.

We will turn to the water section. The water program really is the big loser under the 1987 budget. Leaving aside the construction grant program, the water request is down 11 percent below the 1986 Gramm-Rudman levels and over 15 percent below the enacted amounts.

The Clean Water Act statutory deadline is July 1988. That is fast approaching. EPA has adopted its national municipal policy to achieve compliance with that deadline—but I think we are kidding ourselves, aren't we? We are not going to meet that deadline, are we? Won't there be hundreds, if not thousands, of local communities that don't have a chance of meeting that deadline?

Mr. **Jensen**. Mr. Chairman, that policy has been in place for about two years now and in the course of that we have succeeded in getting about 150 of the major municipalities which were not in compliance into compliance or on a schedule for compliance.

There is still a group of about 400 major municipalities that are not yet on a schedule to bring them into compliance. But there is a commitment in the States and the regions this year, by the end of the year, to have those remaining 400 POTWs on a schedule that would bring them into compliance by the July 1988 deadline.

Mr. **Boland**. What happens if they don't come into compliance by the July 1988 deadline?

Mr. **Jensen**. One of the reasons for the adoption of the policy in 1984 was to make clear our enforcement intentions and to do all we could in the period between 1984 and 1988 to assist those municipalities to come into compliance.

If they do not, we have put them on notice and we will need to take appropriate enforcement action against them.

Mr. **Boland**. Do the reductions in this program have an impact upon whether or not they will be in compliance by July of 1988?

Mr. **Jensen**. The principal reduction or the principal thing that would affect that, of course, is the level of construction grant funding. That is not so much a question of this 1987 budget proposal as it is the reauthorization of the Clean Water Act.

We are still very much up in the air as to what the levels of funding will be when that Act is reauthorized.

Mr. **Boland**. Actually, there is no request yet and the indication we have is that the request by the Administration would probably be about $1.8 billion for the construction grant program.

That is a substantial reduction, 25 percent from the $2.4 billion that has been provided over the last few years.

What impact is that going to have upon communities to meet the deadline in July of 1988?

Mr. **Jensen**. That obviously can't help but have an impact on those communities. I think it needs to be reemphasized, though, that there has never been a one-for-one relationship between the Clean Water Act deadline and the level of Federal funding. It has always been clear that cities would need to bring themselves into compliance whether they were able to get Federal funding or not.

Even if the funding were to remain at $2.4 billion, as has been suggested in the House and Senate versions, you would still have a number of municipalities that would not have Federal funds or a total grant that would allow them to bring themselves into compliance.

So this is an issue that has not been created by the President's phase-down proposal or the 1987 budget.

This is an issue which has been on the table for some time and that is why we focused two years ago in the municipal policy on an effort to alert these cities and to do what we could, either through grants or through technical assistance or just through encouragement, to help them do whatever was necessary to bring themselves into compliance.

Mr. **Boland**. I know, but the best way to encourage them is to make the money available to them. I think when you have reductions like this, you do not offer much encouragement.

As I see it, there are three basic ways to bring cities into compliance: build new construction or treatment plants, use enforcement efforts to force compliance, and get better performance of existing facilities through operator training. Would you agree that those are probably the only three ways to increase compliance?

Mr. **Jensen**. I would think those are the three principal ways, yes.

Mr. **Boland**. The 1988 budget requests that funding be cut or eliminated in each of these areas, does it not?

Mr. **Jensen**. It is true that we would contemplate a smaller grant and less for operator training. Enforcement remains stable at a level commitment to the enforcement area.

Mr. **Boland**. Let me ask the Deputy Administrator whether the 1987 budget is simply at odds with the goals of the Clean Water Act?

Mr. **Barnes**. I am——

Mr. **Boland**. I am talking about funding in order to meet the goals.

Mr. **Barnes**. I think if there was additional money provided for construction grants, it probably would make it easier for a number of communities to come into compliance with other provisions of the Act. As Mr. Jensen indicated, at least as we see the structure of the Act, there has not been a direct linkage between the funding and the requirement to have secondary treatment in place by 1988.

CONSTRUCTION GRANTS

Mr. **Boland**. The 1987 construction grant budget, like last year, is hinged on the Administration's legislative proposal to limit eligibility to existing construction grant projects, no new starts.

How in the world can a small community, which hasn't yet had a grant, possibly get into compliance? There isn't a chance in the world, is there, if you don't fund them?

Mr. **Barnes**. Mr. Chairman, there are a number of communities in this country that have gone forward and financed treatment plants.

Mr. **Boland**. On their own?

Mr. **Barnes**. Yes, on their own or there are a number of States that have programs that help them.

Mr. **Green**. Mr. Chairman?

Mr. **Boland**. Yes.

Mr. **Green**. On that, though, I am rather worried that at the same moment we are cutting down on this and it is proposed to go to the revolving fund, the other major mechanism that seemed last year to be open to communities, namely, the privitization route, is becoming economically much less attractive as a result of pending tax legislation.

It seems the investment tax credit is dead if we have a tax bill, that the accelerated depreciation will be less attractive and there will be severe limitations on the use of tax exempt bonds to fund the plants.

Don't you think you have to reconsider your course in terms of direct Federal funding in view of the tax policy that your Administration is backing and that Congress is buying?

Mr. **Barnes**. Mr. Green, I think those are issues that probably would lend themselves to some discussion between ourselves and Congress in the course of the reauthorization now on the table for the Clean Water Act.

Mr. **Green**. Thank you, Mr. Chairman.

Mr. **Boland**. You talk about enforceable schedules. What does that mean?

Mr. **Jensen**. If the schedule would bring the municipality into compliance prior to the deadline, it can be in the form of an administrative order or certainly a judicial consent decree, but we want a schedule that is specific enough so that if there is slippage, if the community is not able to keep up with the schedule, we would be able to go and get some relief.

If it is a schedule which would bring the city into compliance past 1988, the presumption in the municipal policy is that it would be judicially enforceable by consent decree, one entered into a court of law.

So it depends on the completion date of the schedule as to what form those schedules would take.

Mr. **Boland**. I take it that the compliance schedule can be stretched out by action of the EPA.

Mr. **Jensen**. Yes. We say in the municipal policy that where there is a demonstrated financial or fiscal impossibility of reaching the 1988 deadline that a municipality could probably extend beyond that. We have said that where for other reasons it appears impossible to reach the deadline we would insist that that schedule be incorporated in a judicial consent decree.

1988 WATER QUALITY COMPLIANCE DEADLINE

Mr. **Boland**. How many construction grant projects are needed across the country to bring the communities into compliance for the 1988 deadline?

The State water organization indicates there are about 3,000 projects at a cost of at least $20 billion. Do you agree with that?

Mr. **Jensen**. The last figures I saw, we were looking at about 1,500 major POTWs. Some 1,100 of those are already on a schedule or under construction, and there would be an equal, perhaps an even greater number, of minor POTWs not yet in compliance and in need of some construction to bring themselves into compliance.

So that 3,000 figure is a good estimate. The amount of money required—what was the states' estimate?

Mr. **Boland**. At least $20 billion.

Mr. **Jensen**. About $20 billion. I think that is a good estimate of the total amount of money that would be needed. Of course, when you are talking in terms of Federal assistance, the current construction grant program is 55 percent participation by the Federal Government so you would have to halve that in terms of Federal monies that would be necessary.

CONSTRUCTION GRANTS—SUPPLEMENTAL REQUEST

Mr. **Boland**. Now, the 1987 budget makes no request for construction grants. The footnote indicates that $1.8 billion will be requested in a supplemental after acceptable reauthorization legislation is signed. Is that about the status of it?

Mr. **Jensen**. Yes.

Mr. **Boland**. Now, if the President signs a bill which authorizes more than $1.8 billion in 1987, will the supplemental request reflect that higher figure?

Mr. **Jensen**. If the President signs the bill?

Mr. **Boland**. Yes, for more than $1.8 billion.

Mr. **Jensen**. I would assume so, yes.

Mr. **Boland**. I just want to be sure that the blame is not placed here, should the $1.8 billion figure be raised.

Mr. **Barnes**. Mr. Chairman, I think that if we did get legislation, we would have to do a review. There may be some provisions of that act that would require us to undertake other activities and so on. I think we would need to do a review of it to see what we believe would be an appropriate level of funding for us to suggest to Congress——

Mr. **Kinghorn**. Also, Mr. Chairman, if we went above the $1.8 billion, something else in the President's budget would have to come down by the difference of $600 million under Gramm-Rudman.

ADVANCED TREATMENT PROJECTS

Mr. **Boland**. Let me ask a few questions about advanced treatment projects. As you know, even though you were not here, I think you are familiar with the action of this committee. For the past five years this committee has required advanced treatment projects over $3 million to be approved by the administrator. As a result of that requirement, the EPA has saved around $850 million, almost a billion dollars.

In 1986, we agreed to delegate this responsibility to three regions on a trial basis. Is that approach working well?

Mr. **JENSEN**. The delegation has been made just recently, I believe in February or March. So we really don't have any results in terms of how it is going to work.

Mr. **BOLAND**. Is EPA headquarters actually evaluating all of the reviews to assure consistency in this action by the EPA.

Mr. **JENSEN**. We will conduct a mid-year on-site evaluation in the regions, and one of the areas of inquiry will be to question rather closely how this authority is being used by the regions.

Mr. **BOLAND**. What about the problems in State reviews? What steps have been taken to correct the problems in State reviews of projects under $3,000,000?

Mr. **JENSEN**. Mr. Chairman, I am not familiar with that. I would be happy to check and provide that, if I could.

Mr. **BOLAND**. All right.

[The information follows:]

AT REVIEWS

Currently 10 States are delegated the review responsibilities for projects with incremental advanced treatment (AT) costs less than $3 million.

We are sending a memorandum to all Regions (a memorandum to the three Regions with trials one-year AT delegation has already been sent) outlining detailed procedures and review criteria to be used by the Regions, delegated States and Headquarters for AT reviews. This guidance applies to Regions and delegated States and to projects with incremental AT costs less than $3 million as well as the larger projects. In November 1986, we will evaluate the AT review performance of the Regions and delegated States against the review criteria and procedures to determine whether the reviews conform with the EPA AT Review Policy. A report summarizing our evaluation will be submitted to the Appropriations Committees.

WATER QUALITY—ENFORCEMENT

Mr. **BOLAND**. With respect to enforcement, on page 61, there is a decrease of $3,739,600 below the 1986 add-on level. That is a drop of over 60 percent.

How can the national municipal policy be credible if EPA is reducing its enforcement activities?

Mr. **JENSEN**. The decrease is due to not continuing the add-on that has been made the last two years. The 1985 enforcement grant add-on monies have not yet all been distributed, but they are being used to further the process of bringing the States into using our permit compliance system, our computer system for tracking permit enforcement. These monies are also being used to expand the States' implementation effort in pretreatment and National Municipal Policy.

Since the 1985 funds haven't yet been distributed, it is still undecided exactly how the 1986 funds are to be distributed. We would hope to use those to give some assistance to the municipalities that will likely be unfunded and yet face the compliance deadline of July, 1988.

We would like to put together as good an outreach program as we can to that particular class of municipalities, recognizing that the deadline is bearing down on them and that there will be a good number of them that have little prospect or perhaps no prospect of Federal assistance.

So that is how we will be using that 1986 add-on.

Mr. **Boland**. We understand that 39 States hold NPDES delegations so EPA must enforce this program in the remaining States. Isn't it true that the states EPA is responsible for have the worst compliance record?

Mr. **Jensen**. That is not consistent with the statistics that I have reviewed.

Mr. **Boland**. Will you get a look at the compliance records and indicate what the details are for the record .

Mr. **Jensen**. Be happy to.

[The information follows:]

NPDES Compliance Rates

The following information is a summary of information of facilities that were in significant non-compliance for the quarter shown. The data represent a composite of three types of non-compliance: violations of final effluent limitations, violations of construction schedules and violations of interim limitations (interim limits are included in permit when a facility is on a construction schedule).

PERCENTAGE OF PERMITTED FACILITIES THAT WERE IN SIGNIFICANT NON-COMPLIANCE FOR THE QUARTER

	Dec. 1983	Mar. 1984	June 1984	Sept. 1984	Dec. 1984	Mar. 1985	June 1985	Sept. 1985
Municipals:								
EPA	26	27	16	14	13	16	13	11
NPDES States	17	18	13	13	12	12	9	8
Non-municipals:								
EPA	7	8	4	3	4	4	3	3
NPDES States	8	10	8	8	6	6	6	6

The above data show that NPDES States have high non-compliance rates for non-municipals, but the non-compliance for municipals are higher in EPA States. I would note, however, that the differences in compliance rates, especially for non-municipals, are relatively small. For example, in assessing non-compliance for the 9/85 quarter, the non-municipal rates differ by three percent. This difference represents approximately 75 facilities (out of a total of 2600), or about two facilities per NPDES States.

I think one important trend that is shown above is the decreasing non-compliance rates over the last two years. This trend, which is appropriate for both EPA and NPDES States, is particularly important for municipal non-compliance. The above data shows that municipal significant non-compliance has been cut in half over the last two years. It is important to note that NPDES States have matched EPA States in reducing municipal non-compliance.

Finally, I should note that the above figures are based on our old definition of significant non-compliance. In order to ensure national consistency, we have revised the criteria used for identifying violators that appear on the Quarterly Non-Compliance Report. We believe that the new definitions will tend to show higher non-compliance rates than the above.

Mr. **Boland**. On WQ-7, why does the number of notices of violations drop from the projected level of 110 to 50 in 1986? Congress added funds in 1986. Why don't the outputs increase?

Mr. **Jensen**. Let me make sure I am in the right column here.

Mr. BOLAND. It is on WQ-7, under enforcement action notices of violations, the second line.

Mr. KINGHORN. Mr. Chairman, I think that is probably a difference between the number of notices of violations and the shift into administrative orders.

Mr. JENSEN. You will notice there is a rather dramatic increase in the number of administrative orders.

Mr. KINGHORN. It is a different kind of enforcement action.

INSPECTIONS AT MAJOR FACILITIES

Mr. BOLAND. On page WQ-37, compliance and inspections at major facilities dropped from 6,300 in 1986 to 2,346 in 1987. Doesn't that really undercut the national municipal policy, Morgan?

Mr. KINGHORN. I don't have an answer for that.

Mr. JENSEN. You say the compliance inspections?

Mr. BOLAND. Yes.

Mr. JENSEN. I am not sure there is a direct relationship between inspections and the universe of municipalities we would be working with under the national municipal policy. I think it could be done in those instances where there are already permits issued and municipalities or the industrial facilities are operating under those permits. Whereas the National Muncipal Policy is focusing on municipalities which have either never been brought under permit or have never been in compliance with their permits.

Mr. GREEN. Mr. Chairman, on inspection, I believe it was March 11 you published four ambient aquatic life and water quality documents covering nickel, pentachlorophenol, aluminum and chlorpyrifos, in which you called for monitoring and releases of only once every 73 years.

Is that realistic enforcement?

Mr. JENSEN. I would have to review that. I am not familiar with that proposal.

Mr. GREEN. If you could supply that.

[The information follows:]

WATER QUALITY CRITERIA DOCUMENTS

On March 11, 1986, at 51 FR 8631, EPA published four proposed ambient water quality criteria documents for public comment. These criteria documents recommended both acute and chronic criteria for the protection of aquatic life for aluminum, chlorpyrifos, nickel, and pentachlorophenol. The criteria for acute protection from these pollutants are expressed as one-hour average concentrations which should not be exceeded more than once every three years on the average. The criteria for chronic protection from these pollutants are expressed as four-day average concentrations which should not be exceeded more than once every three years on the average. The EPA proposal makes no reference to "monitoring and releases of only once every 73 years".

Mr. BOLAND. The States have indicated to us that EPA is pressing new priorities on them with respect to groundwater toxic control, pretreatment and biomonitoring. The question that they ask is how in the world they can undertake these priorities, keep up permitting and enforcement work and absorb a 20 percent cut, $62 to $52 million.

Is there any way they can do it? You are handing them additional responsibilities in these particular areas, and yet you are cutting them back by 20 percent. How can they meet these priorities and maintain the permitting and enforcement work?

Mr. **Jensen**. Mr. Chairman, I think you are referring to the proposed reduction in the Section 106 grant monies in 1987. I think it is a reduction of about $10 million.

Mr. **Boland**. That is correct.

Mr. **Jensen**. There is no question that that particular reduction is the most severe in terms of the adjustments that are having to be made as a result of the Gramm-Rudman process. We have recently received from ASIWPCA a rather extensive analysis of what they view as the possible impacts of that cut and that is something I think we need to look at very closely.

Mr. **Barnes**. Mr. Chairman, if I might add one point here. Lee has been in some very active discussions with ASIWPCA and some other State organizations with respect to the distribution of State grants within the $270 million figure that is in the budget.

We have indicated to the States that if they have some different thoughts on how those grants might be arrayed, we would be receptive to talking about that, and we would then in turn probably come forward to you with some suggestion as to some re-arraying there.

In the discussions we have had so far we have gotten some good ideas from the States in terms of grants we had proposed increasing, which may on reflection not make as much sense as some other reordering.

So I think within the overall total for State grants in the President's budget, we are quite amenable to talking with you about some possible readjustments in that overall figure.

NPDES DELEGATIONS

Mr. **Boland**. Has the EPA heard if any of the States are seriously thinking of returning their NPDES delegations?

Mr. **Jensen**. It has certainly not been brought to my attention.

Mr. **Boland**. How many States have authority for pre-treatment now? You may supply that for the record if you don't have it.

Mr. **Jensen**. All right.

[The information follows:]

Approved Pretreatment States

Of the 37 States that have approved NPDES programs, 22 have pretreatment program authority.

Mr. **Boland**. How many States have the performance compliance data system on line for major facility enforcement?

Mr. **Jensen**. I believe there are 15 States and five that have an ability to communicate with the PCS system and we would anticipate within a year-and-a-half those numbers would double.

Mr. **Boland**. How much more money would be needed to bring the rest of the delegated States into the system.

Mr. **Jensen**. I would have to provide that for the record.

Mr. **Boland**. All right. And would that improve compliance tracking considerably?

[The information follows:]

PCS COST FOR NPDES STATES

In FY 1987, it is expected that most of the NPDES States will either be using PCS directly or have an interface with the system. As mentioned earlier in my testimony, we are using approximately $1.9 million of the 1985 enforcement grant funds to assist States in becoming users of PCS. We estimate, that after the 1985 grants are expended, that there will only be a few NPDES States that will not be users of PCS.

Some States that received grant funds did request more funds than we were able to award. It is unclear at this time, what, if any, additional costs are necessary to ensure NPDES States continue to use PCS. In addition, there are a few NPDES States that apparently are not interested in becoming PCS users. Money does not appear to be the problem, but we are continuing to work with these States to encourage them to be PCS users, at least with a PCS interface.

We have limited the use of PCS funds for NPDES permit/compliance information. There is a growing need to develop a data system for pretreatment compliance. We are presently in the feasibility study phase of developing the sytem. At this time, we do not know the cost of the system or the cost to get NPDES States to use the system.

GREAT LAKES RESEARCH PROGRAM

Mr. BOLAND. On page WQ–19, the second paragraph under Great Lakes describes the Great Lakes research program or what is left of it, because it is down by 62 percent. Can the U.S. meet its obligations under the bilateral agreement at this level?

Mr. BARNES. We believe we can, Mr. Chairman.

Mr. BOLAND. What about the Canadians? Are they happy with this or have you talked with them about it?

Mr. BARNES. Mr. Green, have you discussed this with the Canadians? I believe we have briefed them on our budget for the Great Lakes for 1987.

Mr. FITZHUGH GREEN. We have had discussions with them on the Great Lakes program level, with the two coordinators on each side, but not recently. They made their point about it earlier.

Mr. BOLAND. I take it that if you feel you can meet your obligations under the bilateral agreement, the Canadians are probably happy with it then?

Mr. BARNES. I am not sure that would necessarily follow. We would have some active discussions with the Canadians about what we think their and our respective obligations are with respect to that agreement.

Mr. EHRETH. May I add one thing?

Certainly there is a consensus that Grosse Ile and Duluth which provide a primary area of support to the Canadian/U.S. agreement will remain wholly intact.

Mr. BOLAND. You indicate the Grosse Ile Laboratory will be maintained at that level?

Mr. EHRETH. Yes, sir.

Mr. BOLAND. Will you submit for the record the recommendations of the Bilateral Great Lakes Commission for additional research?

[The information follows:]

BILATERAL WATER QUALITY AGREEMENT WITH CANADA

The FY 1986 Congressional add-on for Great Lakes research ($1.4 million) is being used to support the bilateral water quality agreement with Canada. This includes identifying and quantifying both in-place pollutants and source loads of toxic substances. Additional support of the bilaterial agreement is provided by the Great Lakes National Program Office which uses its resources to fund the Great Lakes monitoring and surveillance network. This network collects and analyzes samples from point sources, ambient waters, sediments, ground water, agricultural runoff (indirect), and atmospheric deposition. This effort is coordinated with the Great Lakes research program.

Mr. BOLAND. On WQ-37 there is an indication of 25 Clean Lake project awards in 1986. Are all of those step two awards?

Mr. KINGHORN. Mr. Chairman, they all should be completions of the second step. We will check on it, but that was the requirement.

Mr. BOLAND. And Morgan, will all of those projects will be fully funded and completed with the 1986 funding?

Mr. KINGHORN. That I will have to provide.

[The information follows:]

FUNDING AND COMPLETION OF 1986 CLEAN LAKES PROJECTS

In our 1987 request, we estimated that 25 projects would be funded with 1986 resources. Based upon applications received, we now expect that 22 will be funded. Of the 22 Clean Lakes Projects recommended to be funded in 1986, 17 will have reduced funding as a result of the Gramm-Rudman budget cuts and will not receive their original requested level.

All 22 projects will complete Phase II work with 1986 funds, except the following seven. These seven projects can be only partially funded within the 1986 budget, because they applied for more than the available resources, not because of Gramm-Rudman cuts. The projects are:

Gorton Pond, Rhode Island; Van Cortlandt Park, New York; Umstead Lakes, North Carolina; Black Hawk Lake, Iowa; Ford County Lake, Kansas; Green Lake, Washington; and Lake Chesdin, Virginia.

All projects planned to be funded have been informed that no future Federal funds may be available and they must plan to complete the project with State and/or local funds.

Questions Submitted for the Record by Congressman Traxler

GROSSE ILE LAB

Question. The 1987 request for Great Lakes research seems to take a different tack than previous requests. Where EPA once sought—and was largely successful—in reducing staffing at the Grosse Ile Lab, you are now proposing to freeze staffing and administrative expenditures, but without any research program funding. In other words, your total request for 1987 is $935,000, down from the $2.5 million appropriated for the current year.

Is your 1987 request reflective of EPA's desire to eventually "phase out" the Grosse Ile Lab entirely?

Answer. Currently there are no plans to "phase-out" the Grosse Ile laboratory.

Question. Can you tell us the status of your response to a March 10 letter to the Administrator from the Michigan Department of Natural Resources, questioning you on this very point?

Answer. The response to this letter is being prepared and is expected to be sent in the next few days.

Question. Can you outline for us the specific kinds of projects that have been conducted by the Grosse Ile Lab over the past three years, and tell us what the Administration believes is the best way for such research to be conducted? By state governments? By contracting out? How?

Answer. The Great Lakes Research Program conducted at Grosse Ile (Large Lakes Research Station) has been devoted to issues related to the International Joint Commission (IJC) areas of concern and the chronic pollution problems with toxic substances associated with "in-place" pollutants. The long-term goal of the program is to develop cause-effect relationships (models) based on site specific (Great Lakes) data. The hypothesis is that observable effects can be related to the source of contamination whether the source be point or nonpoint.

Specific projects carried out since 1983 include:

Model development and guidance document for toxic substances in rivers and streams (completed in 1983 for Office of Water).

Model development for the fate of pentachlorophenol (completed in 1985 for several clients).

Development and implementation of analytical chemistry methods to quantify 209 PCB congeners and other organo chlorine compounds important to the Great Lakes. (Major work was completed in 1984; application to different sites is a continuing process.)

Development of toxicity and chemical data bases and model relating chemical gradients to measured biological effects in a Great Lakes area of concern (Monroe Harbor) (1983–1986).

Development of a model relating effects of resuspension and direct uptake from contaminated sediment (In-Place Pollutants) as applied to the Trenton Channel (Upper Great Lakes Connecting Channels Study) (UGLCCS) (1985–1988).

Development of probabilistic exposure models using existing data bases for toxic substances in Monroe Harbor and Saginaw Bay (1985–1988).

Development of mass balances of contaminants of concern in the Detroit River and Trenton Channel (1985–1987).

Acute and chronic toxicity of dioxin, furans and related compounds (1985–1986).

Ecological impact of toxics on the Fox River area of concern (1984–1986).

In addition, technical assistance is provided to the Great Lakes National Program Office (GLNPO), the IJC, and to states bordering the Great Lakes. Examples of this technical assistance include:

Development and application of a Great Lakes in-series model for management of sodium (salt) for (GLNPO 1985).

Support for development and maintenance of Great Lakes point source (computer) files (GLNPO and IJC-Continuing).

Documentation of Great Lakes models (GLNPO–1983–1986).

Participation on IJC and UGLCCS Committees (continuing).

Participation on Niagara River Committees (continuing).

Participation on Rouge River Technical Advisory Committee.

Participation on Milwaukee Harbor Modeling Committee (1983–1986).

Technical assistance for East Central Michigan Planning Agency—data base support (1986).

The plan for the Great Lakes research program in the future is to function in a similar manner as in the past, combining efforts of in-house staff with those of on-site contractors and off-site cooperative agreements. This combination of in-house and extramural research has been found to provide the flexibility needed to meet the needs of the Great Lakes research program.

RESEARCH ON UPPER GREAT LAKES CONNECTING CHANNELS

Question. Specifically, the Upper Great Lakes Connecting Channel research efforts underway: how will they be continued?

Answer. The Upper Great Lakes Connecting Channels Study (UGLCCS) is a closely coordinated research program involving Federal agencies, states which border the Great Lakes and Canada. Each of these entities is responsible for carrying out a portion of the study. This study is jointly funded by the Office of Research and Development, the Great Lakes National Program Office and the State of Michigan. This research will continue in FY 1987, and a final report will be published to provide needed information on sediments and on toxics transport.

GREAT LAKES RESEARCH INITIATIVES

Question. Your justifications seem to mention the "completion" or the "end" of several research projects. Are you planning no new initiatives?

Answer. No new initiatives are planned for FY 1987.

COASTAL ENVIRONMENTAL MANAGEMENT

Mr. **BOLAND.** WQ–48 shows the summary of the Coastal Environmental Management funding. How is it that the 1986 level increases from the $4 million originally requested to over $7 million in the current estimate?

The congressional add-on was only $2 million. Where did you get the rest of the money, Morgan?

Mr. **KINGHORN.** Cynthia Dougherty can answer that question.

Ms. **DOUGHERTY.** We restructured that program element and moved the 301(h) program activities from the permit program element to this program element so all of our coastal resources are in one place.

Mr. Boland. On WQ-51, what two estuary studies are being completed in 1986 as reflected on the statement add-on?

Mr. Jensen. That was the Buzzard's Bay and possibly Narragansett Bay studies.

Mr. Boland. Don't estuary studies take a long time to complete?

Mr. Jensen. Depending on the tasks which are undertaken, yes. But the development of the plan is what is referred to here.

Mr. Barnes. I think we feel our programs have effectively gone to school on what we did in developing the Chesapeake Bay plan and we have been able to shorten considerably the time period that is involved to put one of those plans together.

Mr. Boland. In this activity, what two new areas are being contemplated?

Mr. Jensen. There have been several under consideration. The two that are heading the list at this point would be San Francisco Bay and the Albemarle and Pimlico Sound area down in North Carolina.

OPERATOR TRAINING

Mr. Boland. Anybody who has been here before knows each year we have gone through the same routine on operator training. This Committee, as a number of the members of the Congress are, is interested in operator training. The cities, States, Congress and even EPA agree that in terms of environmental results this is some of the best money we can spend.

But, again, in 1987 there is no request in the President's budget. Any reason for that?

Mr. Barnes. I am not sure. As we looked at trying to operate within the constraints of the overall budget that did not come up high enough on the priority list.

Mr. Boland. You all agree it is almost an essential program; isn't it?

If you don't have operator training, I don't know how in the world you can bring problem plants into compliance.

Mr. Jensen. I think that is correct. The question is whether that necessarily makes it a responsibility of the Federal Government. We think that you have to draw the line somewhere.

If you construct the plant, contribute 55 to 75 percent of the amount of the money to construct the plant, the community ought to be able to operate and maintain that plant.

Mr. Boland. But when you spend that much on the construction grant program to build a facility, I would think that there ought to be some program on the part of the Federal Government to provide training for operators to be sure that the plant operates efficiently to protect that investment.

Mr. Jensen. Certainly what there ought to be is a real effort to stimulate the communities to take care of those facilities once the Federal Government has made the investment. I think, if you leave out the hope that the Federal Government will be there to pick it up, that you just sort of delay the day of reckoning. I think we certainly need to focus on encouraging those communities to take care of that responsibility.

TIJUANA, MEXICO, TREATMENT PLANT

Mr. **Boland**. We haven't heard much about the Tijuana project lately, so let's update it. Have the Mexicans completed their 30 million gallon per day plant on the coast?

It was scheduled to be in operation in January.

Mr. **Barnes**. To my knowledge, Mr. Chairman, that has not been completed. I believe it is scheduled to be completed by 19——

Mr. **Fitzhugh Green**. It will be done in two phases and the first phase is a little behind. It is supposed to be finished this month. This is for 17 million gallons a day.

Mr. **Boland**. Have all of the parties come together to agree on the concept and the design of the defensive system on the United States side of the border?

Mr. **Fitzhugh Green**. No, sir.

Mr. **Boland**. They have not. What are we doing about it?

Mr. **Fitzhugh Green**. We have a proposal from the San Diego city government that was laid before us last week which we have discussed before, designed by the Lowry and Associates Engineers there.

It provides that they would capture the fugitive flows down the canyons that are not being collected and put into the Mexican system. It is about a million gallons that are coming down those canyons daily.

This is how the defensive monies of $32 million would be spent in the proposal that the San Diegans laid on us last week. The problem with it is that this system, if it were built and put into action, presupposes that the Mexicans will allow us to dump it back into their system.

The first thing we have to do is discuss this with the Mexicans. We have not done that. We have held off from discussing the defensive system with them at least long enough so we feel confident they will continue the momentum of their own system.

But the next step we plan to take is to discuss with the Mexican coordinator the idea that if this were built would they accept it back into their system. That still does not make our decision because our region nine experts have some questions about whether we can be sure this Mexican system will work when completed.

Mr. **Boland**. Let me ask, have you obligated any of the $5 million that has been appropriated for design?

Mr. **Fitzhugh Green**. No, sir.

Mr. **Boland**. When do these funds lapse?

Mr. **Fitzhugh Green**. They lapse in September, it is my understanding. Therefore, we feel if we can discuss this with the Mexicans during the next month that will give us time to cross that stream and then make our decision based on our estimate of the situation.

Mr. **Boland**. When would you expect that construction funds would be needed?

Mr. **Fitzhugh Green**. If we started the design and planning phase of it that would take three to six months, with competitive bidding and so forth to get that started and turn it over to the International Boundary Water Commission.

We figure it will take another nine to twelve months before the construction would actually start, which would bring you up close to the end of next year.

Mr. BOLAND. Mr. Green, any questions?

Mr. GREEN. No further questions on this.

Mr. BOLAND. Lindy, any questions?

Mrs. BOGGS. No questions.

Mr. BOLAND. Marty.

Mr. SABO. Not right now.

Mr. BOLAND. Larry.

Mr. COUGHLIN. Mr. Chairman, I do have some questions. Since I will be unable to be here tomorrow, I would like to submit some questions for the record.

Mr. BOLAND. Sure.

INCINERATION AT SEA

Mr. COUGHLIN. Thank you. One of the reasons given by opponents of mandatory acid rain controls is the lack of information concerning acid rain's causes and effects, and I know we will be discussing that later.

I am concerned at the same time thoroughness is not being afforded to incineration-at-sea, an initiative that could have a serious environmental impact. On page WQ–18, the decrease in the Environmental Processes and Effects Research and Development account is attributed to the completion of projects related to several issues including incineration-at-sea. How much money was spent by EPA on incineration-at-sea over the past five years out of the research and development allocation?

Mr. EHRETH. We spent approximately $450,000 and we just recently completed a test burn at our Arkansas facility in which we took the emissions from the incineration of wastes and actually introduced them into a biological assay system that would be found in the sea water. As part of the overall test, that same experimental process will now be moved to the sea.

The incineration-at-sea program is principally managed by the Office of Water and they have invested $1.0 million in 1986, and they will invest up to about $1.1 million or $1.2 million in 1987 to continue this type of research and field evaluation of this particular technology.

Mr. COUGHLIN. Also on WQ–43, reference is made to an increase in incineration-at-sea site designation and permitting activities in fiscal year 1987.

It is my understanding that a test burn may occur and, as you know, about 700,000 gallons of hazardous wastes would be loaded on the test ship at the port of Philadelphia.

What is the current status of the test burn permit and what is the Agency's time frame on permitting on-going incineration-at-sea using Philadelphia as the loading port?

Mr. JENSEN. We issued late last fall a draft research permit, have since held a series of public hearings in several States, and have had a lengthy comment period which just closed. The hearing officer's report is being prepared and will then be submitted to me, in about 45 days, and it would only be at that point we will make the final decision whether to issue the permit.

Once that is done, then the research burn itself would need to be conducted and the results of that burn evaluated and taken into account before we issue final regulations.

Once the final regulations are issued, then it would be the first time EPA would be in a position to accept applications for commercial burns. So I would guess if all went well, the first commercial burns would be well into the latter part of 1987.

We are, however, currently involved in a lawsuit involving the State of Maryland, State of New Jersey and NOAA, which may complicate this program.

Mr. COUGHLIN. Has an EIS been done on incineration-at-sea along the Atlantic Coast?

Mr. JENSEN. An Environmental Impact Statement was done on the proposed site in the North Atlantic where the incinerations will take place.

Mr. COUGHLIN. That has been done?

Mr. JENSEN. Yes, it was.

Mr. COUGHLIN. On page WQ-33, I notice that EPA was promulgating BAT regulations on effluent standards. Last July, you issued a Notice of Availability containing effluent guidelines and pretreatment standards for the organic chemicals, plastics, and synthetic fibers industry. It is my understanding that EPA estimated that the regulation could cost about 12,000 jobs while an industry group has estimated that as many as 17,000 jobs could be lost and close up to 90 percent of some categories of small plants; is that correct?

Mr. JENSEN. I am not certain of those figures. I think we did estimate there would be a substantial impact upon industry as a result of the adoption of the guideline, yes.

Mr. COUGHLIN. Are you considering any other regulatory strategies for small plants to minimize that impact?

Mr. JENSEN. I am not aware of that activity. I will certainly check and see if there is some consideration being given to that.

Mr. COUGHLIN. Does the Agency plan to give the public the opportunity to review and comment on the final approach developed for small plants as well as for other plants?

Mr. JENSEN. Even with a proposed schedule extension, there is no further re-opening of public comment.

Mr. COUGHLIN. I understand the EPA has received about 8,000 pages of public comment on the July notice and I also understand the notice contained a number of different regulatory options without indicating an EPA preferred option.

Do you have a preferred option?

Mr. JENSEN. I guess I am not aware if there has been a preferred option identified by the agency. I could get that for the record.

Mr. COUGHLIN. Provide that.

[The information follows:]

IMPACTS OF THE ORGANIC CHEMICALS, PLASTICS AND SYNTHETIC FIBERS EFFLUENT GUIDELINES

ECONOMIC IMPACTS

On July 17, 1985 EPA published a Notice of Data Availability for the Organic Chemicals, Plastics and Synthetic Fibers (OCPSF) effluent guideline. The Agency prepared compliance cost and economic impact estimates for a wide range of technology options that are being considered under this regulation. For the least stringent controls evaluated for direct dischargers, total annualized costs were estimated at $139 million, resulting in four plant closures and six additional production line closures; the associated employment loss would be 251 jobs, or 0.1 percent of industry employment. The most stringent option evaluated for direct dischargers resulted in annualized costs of $677 million, 24 plant and 25 additional production line closures, and a job loss of 10,157 (5.4 percent of OCPSF employment). The most stringent technology options for indirect dischargers have estimated annualized costs of $166 million, result in a 19 plant and 37 additional production line closures, and 1,595 job losses. Thus, the worst case employment loss totals 11,752 jobs under the most stringent technology options costed by the Agency.

The economic impact analysis shows that projected closures are more heavily weighted among small facilities (less than $5 million in annual sales), especially at the least stringent options. As the more stringent options are considered, projected closures are in the larger size categories as well. Under the most stringent technology options for direct and indirect dischargers, 48 small plants (23 percent of the plants in this size category) are projected to have plant or production line closures.

SMALL BUSINESS IMPACTS

In the July 1985, OCPSF Notice of Data Availability, the Agency reported the results of its preliminary small business impact analysis. EPA will re-examine its current small business definition for this rulemaking (plants with annual OCPSF sales of less than $5 million), will use further screening measures to identify the small busineses affected by the regulation, and will structure (as warranted) alternative levels of pollutant control for small firms. The regulatory alternatives available to the Agency to mitigate any significant adverse effects on small buisnesses include exempting small facilities from national regulations, or regulating fewer pollutants or classes of pollutants at impacted small facilities.

PUBLIC COMMENT PERIOD

The public comment period for the OCPSF regulation ended on December 16, 1985. Given the volume of public comments and the complexity of the rulemaking, the Agency will be unable to promulgate the final OCPSF regulation by the court-mandated date of March 31, 1986. The Agency has developed a promulgation schedule that extends the date for promulgation by about nine months, to December 12, 1986. This schedule includes no further re-opening for public comment. Given the heavy involvement of the industry, the Small Business administration and the EPA Small Business Ombudsman in this rulemaking, the Agency should be able to promulgate without further public comment, a final rule that fully assesses and mitigates, if necessary impacts on small businesses.

COURT APPROVED SCHEDULE

The Agency plans to provide Judge Flannery of the Federal District Court of the District of Columbia with a revised schedule for the final OCPSF rulemaking during the last week March, 1986.

PREFERRED REGULATION OPTIONS

The Agency has not identified preferred regulatory options for the OPCSF rulemaking to date, either in its formal publications or internal analyses. Such preferred alternatives will be selected in the options selected process that will take place during June and July of 1986.

Mr. COUGHLIN. The 1976 consent decree has been modified six times and I understand the agency may request a seventh. This regulatory effort has been going on for twelve years and surely a few additional months for public comment cannot matter that much. Is there any delay under consideration?

Mr. **JENSEN**. In fact, I believe in the past ten days we have gone to court and asked for some additional time to finish the preparation of this organic chemicals guideline. It is perhaps the most difficult of the ones that we have done. As you indicated, there has been an enormous number of public comments and I haven't heard yet whether the court allowed that extension but we anticipate that they will.

STORM WATER RUNOFF REGULATIONS

Mr. **COUGHLIN**. Finally, could you bring the subcommittee up-to-date on the storm water runoff regulations? How are the municipalities and public treatment works reacting to these regulations?

Mr. **JENSEN**. It is not their favorite thing that we are doing right now. Many municipalities have registered concern about those storm water regulations and the publication date for them has been extended several times. What we are doing to accommodate some of the concerns that the municipalities have expressed is we are developing what we call a group application procedure which would obviate the need of each municipality on its own going through that process to get a permit.

We are hopeful that will make these particular regulations much more manageable and yet still achieve the requirements of the act.

Mr. **COUGHLIN**. Do you have any estimates of how much these regulations will cost municipalities?

Mr. **JENSEN**. I haven't seen the estimates. If there are some, we will provide them for the record.

[The information follows:]

COST TO MUNICIPALITIES OF STORM WATER REGULATIONS

The Agency does not have good estimates of how much these regulations will cost municipalities.

However, since the proposed regulations are deregulatory and are intended to reduce sampling, analysis and application requirements, they could result in an overall reduction in these costs for municipalities. At present, all point sources discharges must be sampled and analyzed for a variety of pollutants. Rough estimates indicate there could be one million municipal storm water point source discharges that would have to be analyzed at a cost of approximately one thousand dollars per outfall for a total cost of approximately one billion dollars. The proposed "group application" approach would eliminate the need to sample each outfall, drastically reducing the costs, and focus instead on gathering adequate, representative data.

The Agency has no data upon which to estimate potential capital costs stemming from permits issued to municipalities for storm water runoff. Permit requirements are established based upon a review of the application data and by applying the appropriate technology based standard (BAT/BCT). Local water quality constraints would also impact the final permit terms. Until that data is gathered and anaylzed and permit requirements are developed, capital cost estimates would be premature and purely speculative.

Mr. **COUGHLIN**. Thank you, Mr. Chairman.

Questions Submitted for the Record by Congressman Coughlin

OCEAN INCINERATION AND ACID RAIN RESEARCH

Question: To follow up on my earlier questions, would you provide for the record the amount of money EPA has spent over the past five years on ocean incineration research and development.

Also, please compare the research and development expenditures for incineration-at-sea to that allocated for acid rain research and development. Please list these expenditures for each of the past five fiscal years.

Answer: The Agency did not spend funds for ocean incineration research and development during fiscal years 1980-1984. The Agency spent approximately $1.5 million dollars in fiscal year 1985 for ocean incineration research. These funds, from the Abatement, Control and Compliance Appropriation, are expended for test burns and controlled by the Office of Water.

The following table, which compares funds for ocean incineration research to acid rain research, provides actual obligations for fiscal years 1980-1985, and estimates of obligations for fiscal year 1986.

RESEARCH OBLIGATIONS

(Dollars in Millions)

Fiscal Year	Ocean Incineration	Acid Rain
1980	$ 0.0	$ 1.9
1981	0.0	6.9
1982	0.0	9.2
1983	0.0	13.1
1984	0.0	22.8
1985	1.5	38.0
1986	1.0*	48.8*
Total	$ 2.5	$ 140.7

*Estimate of Obligation

OCEAN INCINERATION EIS - ATLANTIC COAST

Question: Earlier in response to one of my questions, it was stated that an Environmental Impact Statement had been prepared on incineration-at-sea in the North Atlantic. Has an EIS been prepared for the Atlantic Coast site off Philadelphia currently under consideration for a test burn?

Answer: The site under consideration for the research burn is the proposed North Atlantic Incineration Site (NAIS). This site covers an area of 1,240 square nautical miles (nm) (approximately 30nm by 40nm) and is centered approximately 140nm East of the mouth of Delaware Bay in water depths ranging from 2,400 meters to 2,900 meters.

A draft Environmental Impact Statement (EIS) was prepared for the site in January, 1981 and a final EIS was prepared in December, 1981. Site designation was proposed on November 17, 1982 and a public hearing was held in Ocean City, Maryland on April 14, 1983 to receive comments on the designation proposal. The Environmental Protection Agency (EPA) has not yet completed the final designation process.

WATER QUALITY

Question: On page WQ-36, I notice that EPA again is requesting no funds for the Clean Lakes Program.

As you know, legislation reauthorizing the Clean Lakes Program is awaiting conference and the House-passed version of the reauthorization includes provisions allocating $30 million a year to the Clean Lakes Program.

The House-passed bill also directs EPA to make grants to States for priority projects for control of nonpoint sources of pollution which are contributing to the degradation of water quality in lakes.

Given this expressed Congressional support for the Clean Lakes Program, does EPA plan on requesting additional funds once a reauthorization is signed into law as EPA has stated it will for construction grants once reforms are enacted? If not, why?

Answer: As Deputy Administrator Barnes stated during the House Appropriation hearing, EPA will certainly review the final Clean Water Act reauthorization, once it is signed by the President, to determine the impacts on our FY 1987 budget request. However, to the extent that additional budget needs are identified, the Gramm-Rudman-Hollings Act would require the Administration to offset any increases beyond its current budget request level with reductions elsewhere.

The Administration has provided the Congress with its view that the provisions in the CWA reauthorization bills for Clean Lakes and nonpoint source pollution grants are (1) areas better dealt with at the State/local level and (2) burdens to the budget.

NESHAPS - METHYLENE CHLORIDE

Question: On page A-27 of the justification, it is stated that work toward the development of new National Emission Standards for Hazardous Air Pollutants for methylene chloride will continue in fiscal year 1987.

What is the Agency currently doing on methylene chloride? It was my understanding that up until May of last year, EPA had encouraged State environmental agencies to allow the use of methylene chloride in paint products in order to replace aromatic solvents. Is that understanding correct?

Answer: The EPA has not specifically encouraged state environmental agencies to allow methylene chloride as a substitute in paint products or any other application. On October 17, 1985, EPA announced in the Federal Register the initiation of a regulatory investigation to determine if methylene chloride presents an unreasonable risk to human health and to determine if regulatory controls are needed to reduce exposure to methylene chloride. We are exploring regulatory alternatives under the Toxic Substances Control Act, the Clean Air Act, the Safe Drinking Water Act, and the Federal Insecticide, Fungicide and Rodenticide Act. We are also assessing, in cooperation with other agencies, the applicability of statutes administered by the other agencies.

Question: What alternatives are currently available for methylene chloride? Again, it is my understanding that the alternatives are acetone and butyl acetate which are extremely hazardous due to their flammability. Is that understanding correct?

Answer: There are some solvents that can be used as alternatives to methylene chloride in some specific applications, but there are no broadly applicable alternatives. Acetone and butyl acetate probably can be used in some limited applications, but as you note, they are extremely flammable. Efforts have been broadened to specifically consider other high-volume chlorinated solvents (perchloroethylene, trichloroethylene, methyl chloroform and chlorofluorocarbon 113) which are used in many of the same types of applications as methylene chloride and may serve as alternatives in some cases. Other possible substitute solvents also are being evaluated. This integrated multi-pollutant investigation is initially focusing on four exposure categories: metal cleaning, drycleaning, paint stripping and aerosol use.

Question: Could you also provide me with the time-frame schedule EPA has prepared on the issuance of a new standard for methylene chloride?

By the end of this year, we plan to complete our regulatory investigation of degreasing and drycleaning. At that time, we will bring recommended regulatory options to the Administrator for decision. This will be followed by the development of proposed rulemaking, where appropriate. Regulatory investigation by the other two major exposure categories is scheduled for completion in 1987.

FROZEN PROJECTS

Question: I think we all agree that Superfund must be reauthorized as quickly as possible. Quite simply, time is running out and I am concerned that the message to reauthorize the program is not getting out to the public.

While some individuals and local governments are aware that work on sites is being slowed down, if not stopped altogether, I think it would serve us all well if additional information was put forth.

If you would just take the first 50 sites on the NPL, would EPA list exactly what cleanup steps are being delayed and also when, where applicable, contractors at those individual sites will be released from their contracts?

Answer: On March 21, Congress appropriated $150 million to fund the Superfund program. Assuming the legislation is signed by the President, EPA does not foresee terminating any remedial contracts. Additionally, some previously frozen activities will now begin because of the availability of the $150 million. The delay in reauthorization has postponed work at twenty of the first fifty sites.

ST	SITE NAME	PREVIOUSLY FROZEN ACTIVITIES
NJ	Lipari Landfill	RD
DE	Tybouts Corner	RD
NJ	Helen Kramer L/F	RD
MA	Industri-plex	RD
NJ	Price L/F	RD
NY	Pollution Abatement Services (PAS)	RA
MA	Nyanza Chemical	RI/FS,RD,RA
NJ	GEMS L/F	RD

KEY: RI/FS - Remedial Investigation/Feasibility Study
RD - Remedial Design
RA - Remedial Construction

ST	SITE NAME	PREVIOUSLY FROZEN ACTIVITIES
NJ	Lone Pine L/F	RA
MT	Silver Bow Creek	RI/FS
MI	Liquid Disposal	RD
PA	Tysons Dump	RA
TX	MOTCO	RI/FS
OH	Arcanum Iron	RD
ME	McKin Co.	RA
NJ	Bridge Brt Rental	RA
NJ	Burnt Fly Bog	RD
MN	New Brighton/Arden Hills	RI/FS
FL	Reeves Southeastern	RI/FS
WA	Western Processing	RD

KEY: RI/FS - Remedial Investigation/Feasibility Study
RD - Remedial Design
RA - Remedial Construction

PAOLI RAIL YARDS

Question: I have always been interested in the way new hazardous waste sites come to EPA's attention. One such site in my district (Tyson's Dump) was brought to your Agency's attention by a concerned constituent who noticed foul odors at the dump.

Just recently EPA initiated action at a rail yard located near my district where testing showed high levels of PCBs. The yard is owned by Amtrak and used by Conrail and Southeastern Pennsylvania Transit Authority (SEPTA) to repair rail cars and the rail yard has been in operation for more than 40 years.

If my memory serves me correctly, testing has been conducted at this rail yard as far back as 1979 when Amtrak came under a Pennsylvania Department of Environmental Resources order. At that time remedial action was requested but not taken.

I was wondering what steps led EPA to take its recent action at the rail yard at this particular time since, as I said, reports of PCB contamination were available as far back as 1979. Also, for the record, could you ~~list~~ what those steps were and/or any soil sample results during the time period from 1979-1986.

In further regard to Paoli Rail Yard, what activities do you plan on taking and does the Agency have the financial resources to take any action prior to the reauthorization of Superfund?

Also, are you working with Amtrak, Conrail and SEPTA in the formulation of appropriate response actions?

Moreover, if available, do you have any preliminary cost estimates for remedial work and how much work has occured at the Yard?

Answer: The following is a chronology of the events leading to EPA's decision to initiate enforcement actions pursuant to section 106 of the Comprehensive Environmental Response Compensation Liability Act (CERCLA) of 1980, section 7 of the Toxic Substances Control Act (TSCA), and section 7003 of the Resource Conservation and Recovery Act.

The locomotive service facility located at the Paoli Rail Yards was inspected by EPA in 1978. No soil samples were taken.

- In 1979, the Pennsylvania Department of Environmental Resources (PADER) inspected the locomotive service facility and adjacent work areas. Minimal levels of PCB contamination were noted in surface runoff and puddles near the service facility.

- In 1979, PADER issued an order requiring AMTRAK and Southeast Pennsylvania Transportation Authority (SEPTA) to make a determination of the extent of contamination and correction of any problem areas.

- Between 1979 and 1985, AMTRAK and SEPTA took some responsive actions which involved primarily the collection of samples and some minor cleanup efforts. During this time, the site was a PADER enforcement action (as a result of the 1979 PADER order).

- In June 1981, AMTRAK and CONRAIL received the results of onsite sampling performed by a consultant. Of the 83 samples taken at locations throughout the Paoli Railyard, 3 showed PCB contamination in excess of 1,000 ppm and trace levels of PCB were recorded at depths up to 14 feet.

- In December 1981, AMTRAK submitted the results of the June 1981 data to PADER.

- In July 1984, AMTRAK and SEPTA received the results of onsite sampling performed by a consultant during June 8, 1984. Of the 75 samples taken at location throughout the Paoli Railyard, 59 showed PCB contamination in excess of 100 ppm, 9 were in excess of 500 ppm PCB, and 3 showed PCBs in excess of 20,000 ppm at a depth of 36 inches.

- In the fall of 1985, EPA became aware of the AMTRAK/SEPTA July 1984 sampling. On November 5, 1985, the July 1984 sample results were submitted at the Agency's request.

- On December 18, 1985, EPA personnel inspected the Paoli Railyard and surrounding areas. Soil samples were taken offsite, in stormwater runoff gulleys and pathways leading from the site, and at four locations on residential properties.

- In mid-January 1986, EPA received the results of the December 18, 1985, inspection samples. The data showed levels of PCB contamination in excess of 2,500 ppm in one offsite gulley and in excess of 100 ppm in a residential vegetable garden.

- On January 28, 1986, the Agency for Toxic Substances and Disease Registry (formerly the Center for Disease Control (CDC)) issued a preliminary evaluation of the public health threat posed by PCBs at the site. Based upon review of the 1984 sample results and 12/18/85 off-site sampling, CDC recommended that access to the rail yard be restricted, measures be taken to prevent offsite movement of PCB-contaminated soil on workers shoes and clothing, off-site sampling be performed to assess the extent of off-site movement of PCBs, and sampling be conducted to determine the extent of downward mobility.

- On February 10 and February 19, 1986, respectively, the Regional Administrator issued the requisite public findings for the initiation of enforcement action under TSCA and CERCLA, and under RCRA.

- On February 21, 1986, the Regional Administrator authorized the use of CERCLA funds for removal actions at the site.

- On February 25, 1986, civil action was filed by the U.S. on behalf of EPA against SEPTA, AMTRAK and CONRAIL to obtain abatement of the PCB contamination of the Paoli Railyard and surrounding areas.

At the present time, the Regional Administrator has authorized $383,500 to initiate a potential five-phase removal action to address PCB-contamination at the Paoli Rail Yard and surrounding areas. To date, the rail yard portion of the site has been secured to limit access, an extent-of-contamination study is beng performed regarding properties surrounding the rail yard, a small area of PCB-contaminated soil has been excavated from a drainage ditch outside of the rail yard area, and the direct contact threat to PCB exposure in a residential backyard has been mitigated.

As more data on the extent-of-contamination outside of the rail yard area becomes available, individual properties will be addressed.

As a result of preliminary enforcement negotiations with the U.S., SEPTA has assisted in EPA removal efforts by taking response measures to limit site access to the rail yard area, limit offsite migration of contaminated soils, and by limited onsite sampling.

Based on information currently available to EPA, preliminary cost estimates indicate that the ultimate remedial measures necessary to clean up this site could be greater than $20 million.

WORKFORCE PLANNING

Question: During last year's hearings, there was considerable discussion of the Office of Technology Assessment's report on Superfund. One of the more significant statements in the OTA report concerned the lack of qualified personnel and technicians to work on Superfund sites.

Has any progress been made in this area and does the Agency foresee shortages for both contractors and EPA in hiring qualified individuals in some of the more demanding fields like water hydrologists and hydrogeologists?

Answer: The Agency is currently conducting an in-depth Superfund Workforce Planning Project. This project will provide an estimate of the quantity and type of workforce needed to perform the work over the next two to five years under a reauthorized Superfund program. The project will identify the skills and competencies of current Superfund staff, identify discrepencies between available skills and competencies of the currrent workforce and those required for the program at reauthorized levels, and identify potential staff shortages in special areas. Because of the frequency of water contamination problems encountered at hazardous waste sites, special recruitment and retention efforts are most likely to have to emphasize specialties such as toxicology, hydrology, engineering geology and health.

Mr. **Boland**. Mr. Sabo.

CLEAN LAKES PROGRAM

Mr. **Sabo**. Thank you, Mr. Chairman.

I notice in your justifications that you are requesting no funds for the Clean Lakes program, a program which has been very successful in terms of cost benefits and critical in dealing with the problem of non-source pollution. You note that it is a demonstration program and you don't plan to request any additional funds.

Can you estimate how many lakes will be cleaned up because of EPA's action in 1987.

Mr. **Jensen**. I don't have that figure. I can provide it for you.

Mr. **Sabo**. Would you please?

Mr. **Jensen**. Yes. Certainly.

[The information follows:]

Estimate of Lakes To Be Cleaned Up Due To No Funding in FY 87

The Environmental Protection Agency has requested no funding for the Clean Lakes Program in FY 1987.

Since EPA does not tract State funded projects, we cannot estimate the number of lakes to be cleaned up.

Mr. **Sabo**. It appears that your policy on clean lakes indicates the Administration wishes to abandon the Federal role in a non-point source pollution and protecting fresh water supplies.

Mr. **Jensen**. To the contrary. I think the failure to request funds for the Clean Lakes program is consistent with our analysis of the non-point source problem which is that it is one by its very nature that more properly should be handled at the State and local level. The Federal Government ought to be very wary of getting itself into a funding program for non-point source that would require the Federal Government to fund the implementation of those practices.

Our strategy has been one of technical assistance, of trying to focus on the problem, of encouraging the States and the localities to again adopt the sorts of practices to charge the everyday activities that produce non-point source pollution.

So I think now——

Mr. **Sabo**. The technical assistance is not needed any further?

Mr. **Jensen**. I don't mean to suggest that. Under our non-point source strategy that we have adopted as an agency there is still technical assistance being given. What I am suggesting is that in the clean lakes program the Federal Government has gone in, made a stakes investment in an effort to give some oomph to the program, if you will, to demonstrate to the communities the benefits of taking seriously this non-point source pollution problem and——

Mr. **Sabo**. Let me ask the question this way. Has it worked? Have the funds been spent?

Mr. **Jensen**. I think there have been some dramatic results. I was in Utah two weeks ago and took the occasion to view some of the demonstration projects that were partially funded by those moneys. I was quite impressed with the sorts of things that can be done to reduce the non-point source pollution problem with the lakes.

DRINKING WATER PROGRAM

Mr. **Boland**. We will move on to drinking water. Page DW-2 reflects a 5.2 percent overall reduction and FTE drop slightly—about eight positions. On page DW-5, there is an indication that EPA is adequately responding to threats to groundwater. Is the existing legislation and statutory authority really sufficient to protect the ground water?

Mr. **Jensen**. As I am sure you know, Mr. Chairman, when the groundwater strategy that the agency adopted was developed, there was a thorough review of that question. We concluded then and continue to believe that we have substantial and really potent authority to address the major contaminants of concern. We are focusing on those authorities in an effort to address the groundwater contamination problems.

Mr. **Boland**. Is it possible that new legislation may require additional standards and regulations?

Mr. **Jensen**. That new legislation might?

Mr. **Boland**. Yes.

Mr. **Jensen**. I know there have been several legislative proposals made and I assume some of them will——

Mr. **Boland**. Does it appear as if there will have to be new guidelines and standards and regulations adopted as a result of new legislation? Is that likely?

Mr. **Barnes**. Of course, the Safe Drinking Water Act is awaiting conference. I think you are correct, Mr. Chairman, that out of that could come an expanded list of contaminants for us to address and schedules that we would have to operate within. I think again, as I indicated with respect to the Clean Water Act as we see what bill would finally be enacted, that we would propose to take a look at that, see what new obligations and responsibilities we would have and then we would——

Mr. **Boland**. If you have new obligations vis-a-vis standards and regulations, I presume that would put an additional funding burden on you, wouldn't it?

Mr. **Barnes**. That is correct. Although I think a fair number of chemicals on the list that we would be expected to address have been working their way through the regulatory process at this point.

Mr. **Jensen**. That is true. But certainly with respect to any new groundwater legislation we would have to take a look at exactly what it is they expect the Federal Government to do.

UNDERGROUND INJECTION CONTROL PROGRAM

Mr. **Boland**. On DW-7, the data shows that underground injection control inspections are down from 48,000 in 1985 to 34,000 in 1986, and 31,000 in 1987. What causes that decrease?

Mr. **Jensen**. Mr. Chairman, I would hope that that is a result of the fact that we are getting strong State programs in place but I would like myself to have a chance to review that and respond on the record.

[The information follows:]

DRINKING WATER: DECREASE IN UIC INSPECTIONS

From 1985-1987, the estimated number of underground injection control inspections that will be conducted by both primacy States and EPA will decrease. For fiscal year 1985, EPA estimated that approximately 48,300 UIC inspections were conducted by the States and EPA. This estimate was based on an extrapolation of preliminary data collected from only a few States. Final State data for FY 1985 is expected from the primacy States over the next several weeks.

Our current estimate for fiscal year 1986 is based on prenegotiated State commitments which are required as part of annual EPA-State agreements under the Strategic Planning and Management System (SPMS). Since these are official commitments of what States and EPA are obliged to accomplish, the number likely understates the probable performance. For fiscal year 1987, the estimated number of UIC inspections by primacy States reflects a reduction in grant resources. In FY 1986, EPA also expects to issue guidance on conducting inspections. This guidance is expected to raise the quality of inspections but may temporarily reduce the number performed.

Mr. BOLAND. With this sort of decrease, do you expect this trend to continue?

Mr. JENSEN. You hope that trend would continue as most programs mature.

Mr. BOLAND. Can you indicate for the record or if you know now you may supply it, how many of those are State inspections and how many are EPA inspections?

Mr. JENSEN. I would have to provide that for the record.

[The information follows:]

DRINKING WATER: UIC INSPECTIONS

For 1985-1987, the number of UIC inspections that have been or are projected to be conducted by primacy States and EPA is provided below:

UIC INSPECTIONS—STATE VS. FEDERAL

	1985	1986	1987
EPA Inspections	2,018	2,971	5,373
State Inspections	46,282	31,207	26,090
Total	48,300	34,178	31,463

Mr. BOLAND. Are EPA and the States still on schedule in making the five-year deadline for all UIC permits?

Mr. JENSEN. I guess I will have to provide that for the record, too.

[The information follows:]

DRINKING WATER: UIC PERMITS SCHEUDLE

EPA and primacy States are, in general, on schedule for meeting the five-year regulatory deadline for all UIC permits. Permitting for existing wells related to deep injection of industrial and municipal wastes (Class I) and mining wells (Class III) is expected to be completed by 1988. However, for EPA direct implementation programs, the completion of permits for existing Class II brine disposal wells associated with oil and gas production depends on continued funding at current levels and on the number of new permit applications received by EPA. Data is currently not available to accurately project the number of expected new Class II permit applications.

Mr. BOLAND. That question, of course, is prompted by this same page which indicates that the projected number of State delegations will not materialize in 1986. The estimate drops from 42 to 38.

If EPA must administer the program directly in four additional States, how can you maintain the permitting schedule without additional resources in the various EPA regions?

Mr. **Kinghorn**. To some extent, Mr. Chairman, the funding can be offset by the grants. We can use the grants when the States don't take the program. So that will help us to some extent.

[The information follows:]

DRINKING WATER: UIC PRIMACY STATES

The 1986 President's budget estimated that during fiscal year 1986, 42 States would have primacy over all or part of the UIC requirements. Currently, there are 38 States with full or partial primary enforcement authority. The reduced estimate in 1986 is the result of the Agency's rejection of several unacceptable State primacy applications. Since then one State has re-applied for delegation of primary enforcement responsibility. EPA expects to delegate partial primacy authority to this State in the next few months.

DW—ENVIRONMENTAL PROCESS AND EFFECTS

Mr. **Boland**. On DW-18 there is an indication that the request for research and environmental processes and effects drops from $5.6 million in 1986 to $5 million in 1987. What about this decrease—is it justified?

Mr. **Ehreth**. Sir, it is really a shifting of emphasis from dealing with contaminants that we have been looking at for drinking water purposes to re-focus resources into the pesticide program. So if you take a look at the overall groundwater research program, you see overall it increases by about $50,000 out of a $21 million program.

Mr. **Boland**. A good deal of the aquifer research has been done by the Garber Wellington Association over the past several years through the Ada, Oklahoma lab. Have you been satisfied with the quality and relevance of that research?

Mr. **Ehreth**. We had that conversation. We will have an additional conversation with Mr. McCurdy from Oklahoma in a couple of weeks, as a matter of fact. The proposals that have been advanced by Garber Wellington people focus on research needs that we have been researching for at least ten years already, septic tanks impacts of that nature. I think Mr. McCurdy and I agree we at EPA are probably guilty of not doing a good job in technology transfer, so we have proposed to sit down with the Garber Wellington people to see if we can't give the information to update their management plan for groundwater resources.

Mr. **Boland**. Groundwater research is funded through several media. Will you update for the record the summary table which is provided on page 332 of last year's hearings?

Mr. **Ehreth**. Yes, sir.

[The information follows:]

GROUNDWATER RESEARCH RESOURCES

[Dollars in thousands]

Research program area	Fiscal year 1986 current estimate		Fiscal year 1987 President's budget	
	FTE	Total dollars	FTE	Total dollars
Drinking water	29.5	6,463.4	29.5	$5,969.0
Hazardous waste	56.3	14,041.0	66.3	13,812.8

GROUNDWATER RESEARCH RESOURCES—Continued

[Dollars in thousands]

Research program area	Fiscal year 1986 current estimate		Fiscal year 1987 President's budget	
	FTE	Total dollars	FTE	Total dollars
Exploratory research groundwater center		516.8		540.0
Pesticides	0.0	0.0	3.0	750.0
Superfund		(1)		(1)
Total	85.8	21,021.2	98.8	21,071.8

[1] Pending Superfund reauthorization.

NATIONAL PESTICIDES SURVEY

Mr. **Boland**. On DW-24, in the middle of the page, there is an indication that the major effort on the National Pesticide Survey will continue in 1987. Is that survey actually underway?

Mr. **Jensen**. Mr. Jack Moore made me promise to let him answer this question.

Mr. **Moore**. Congressman, the design phase of the survey is essentially completed. We are now addressing a few questions raised by the peer review committee. We anticipate beginning to collect samples in this fiscal year, or at least in this calendar year, and continuing into 1987. We also anticipate letting a contract for the actual analysis of the samples this fiscal year.

Mr. **Boland**. When would you expect that actual sampling and data collection would begin?

Mr. **Moore**. Probably late this year. The majority of sampling and data collection would occur next year as well as the analysis.

Mr. **Boland**. Have you any idea when EPA will have some indication of the extent of groundwater contamination by pesticides?

Mr. **Moore**. We will have the final results from a national perspective, probably not until sometime in fiscal year 1988. However, we will have results earlier from a sample being positive or negative in a particular locale. I think this is going to stimulate some attention by the population of the county or municipality at the time the analysis of the ground water sample is made.

Mr. **Boland**. On DW-27, the last paragraph, States are preparing to implement the regulation on volatile organics which will become effective in 1988. Weren't those regulations scheduled to be out last year?

Mr. **Jensen**. Those regulations are on schedule. The final RMCLs or the final MCLs were published last fall and the proposed RMCLs simultaneously with those and we would expect to finalize the rule altogether sometime towards the end of this year. So they are on schedule.

But there is then, as I understand it in the law, a period of time before which a regulation that is published becomes effective in terms of the States having to be able and ready to begin monitoring for those contaminants.

DW—ASBESTOS STANDARD

Mr. **Boland**. What has happened to the asbestos standard for drinking water? It was due some six months ago.

Mr. **Jensen**. Yes. I guess I would have to provide that.

Mr. **Boland**. Okay.

[The information follows:]

Drinking Water: Asbestos Standards

EPA proposed a Recommended Maximum Contaminant Level (RMCL) for asbestos on November 13, 1985 (50 FR 46936) as part of the proposed rulemaking for synthetic organic chemicals, inorganic chemicals and microorganisms in drinking water.

Mr. **Boland**. What is the current scientific opinion on health risks from ingesting asbestos fibers?

You may supply that for the record, too.

[The information follows:]

Health Risk From Ingested Asbestos

In October, 1982 the U.S. Environmental Protection Agency sponsored a workshop on ingested asbestos. The summary of this workshop was published in Environmental Health Perspectives Volume 53, November, 1983. Based on epidemiological and toxicological data presented at this workshop it was concluded that the health risks of ingesting asbestos fibers are minimal. Results of animal feeding studies indicate that asbestos fails to demonstrate toxicity in whole-animal lifetime exposures. Epidemiologic studies conducted on populations served by drinking water containing asbestos fibers failed to produce convincing evidence of a health risk from ingesting asbestos fibers.

In a recent review (1985), the Science Advisory Board (SAB) concluded that "current peer-reviewed evidence for humans and animals does not support the view that asbestos ingested in water causes organ specific cancer." Thus, current scientific opinion continues to support the view that the health risk from ingesting asbestos fibers is minimal.

NATIONAL GROUNDWATER STRATEGY

Mr. **Boland**. Now, your justification makes very little mention of the national groundwater strategy. How is that progressing, briefly?

Mr. **Jensen**. It is progressing well. The principal focus right now is the development of our classification guidelines which we would expect to publish later this spring. We will then shift a focus on the various programs to them to employ those guidelines so that the decisions they make about groundwater will be more uniform and more effective in protecting the resource.

Mr. **Boland**. Can you indicate how many States have operational groundwater programs?

Mr. **Jensen**. I believe the number is ten, with about two dozen other States in the process of developing groundwater protection strategies, and the rest are initiating activity.

Mr. **Boland**. What percent of the State water grant funds are going to support groundwater program activities?

Mr. **Jensen**. In the past two years about $7 million of those funds have been available to the States. As a result of the reduction in the section 106 grant level, there would be slightly less than that planned in 1987.

Mr. **Boland**. You have a 20 percent cut in State section 106 water grants. Won't that impact upon the States and kind of scuttle the groundwater program?

Mr. **Jensen**. Groundwater is one of the programs that would be funded by those 106 grants so to the extent they are cut, it could well be affected.

Mr. **Boland**. Mr. Green.

UNDERGROUND STORAGE TANKS

Mr. **Green**. Last summer during the August recess I attended the meeting of the Coalition of Northeast Governors on Water Quality. I guess they sounded a little less optimistic than you just sounded on the state of the groundwater problem.

According to the information I gathered there, about 25 percent of all underground tanks are leaking and the purity of groundwater can no longer be assumed. They found the managing of aquifers was limited and little was being done to manage the pesticides, which are now considered the number one contaminant, with solvents and land fills not far behind.

Mr. **Jensen**. A couple of comments. One, we are right in the middle of development of the underground storage tank regulations. That is without question a significant contributor to groundwater contamination and there is a Federal program being developed to address that.

As far as the Northeast Governors go, while they are concerned, and rightly, with groundwater contamination, I think you would find that that particular association, perhaps more so than any other, is of the view that groundwater protection is something that the States themselves should have the primary responsibility for and would resist, even given their concern about the problem itself, rushing in with new Federal programs to solve it.

They are very proud of what they are doing in their own region.

Mr. **Green**. That is certainly true. I have recently read a publication issued by the Citizens Union Foundation, a non-profit government organization in New York City, entitled "Thirsty City", examining the New York City's water supply problems.

On page 53 there was a discussion of a Federal grant. "For non-point source controls, controls for pollutants that don't emerge from pipes. The State's major effort has been the model implementation plan, MIP in the west branch of the Delaware River in the drainage areas of the city's Canonsville reservoir. MIP federally funded and State Department of Environmental Conservation examined alternative best management practices for barnyards, crop lands and timber lands. Participation by the city was minimal. Now, with Federal funding at the end, no effort has been made by either the city or State to continue the MIP program or apply its lessons to other watershed areas."

That is a rather unhappy outcome after a significant investment of Federal money. I was wondering if you could comment on that particular situation and sort of the larger situation of follow-on when you do this kind of thing.

Mr. **Kinghorn**. We can provide it for the record, but I think that particular project was an old section 208 planning program.

Mr. **Green**. If you could give me the details of what happened there and why it seems to fall on its face.

Mr. **Jensen**. That is unfortunate.

[The information follows:]

DELAWARE RIVER/CANONSVILLE RESERVOIR PROJECT

This project, initiated in the late 1970's, was one of seven national nonpoint source (NPS) demonstration projects under the "Model Implementation Program" (MIP). These projects were joint Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), and State efforts to demonstrate the effectiveness of best management practices (BMPs) in reducing NPS loads. As implied by the title of the program, these were implementation projects, not planning programs.

This specific MIP project for the west branch of the Delaware River was particularly effective in designing and testing practical approaches for minimizing the nutrients from dairy operations reaching the Canonsville Reservoir. As the results of this demonstration were only completely published recently, the State has been waiting before applying the lessons from this MIP.

We understand that in their current budget the State Department of Environmental Conservation will begin transferring the results of this project to other watershed areas, particularly in the Lake Ontario Basin. We believe this does indicate the efficacy of states using lessons learned from NPS demonstrations.

Mr. **Green**. They go on to say that "there seems to be an algae problem there and that the State Department of Environmental Conservation has been reluctant to insist on the cost of treatment required for phosphorus removal unless Federal funding is available and unless there is proof from studies which neither the State nor the Federal Government will pay for, that other unregulated sources won't also lead to algae growth. Meanwhile, the algae blooms continue."

Again, if you could perhaps provide us something for the record.

Mr. **Barnes**. Be happy to do so.

[The information follows:]

ALGAL BLOOMS IN CANONSVILLE RESERVOIR

Algal blooms continue to occur in the upper regions of the Canonsville Reservoir and at times the water becomes a pea soup green.

The model implementation plan (MIP) identified phosphorus as the major contributor to the recurring algae problem. In the 116,000 hectare watershed, both point and nonpoint sources contribute phosphorus loadings. The point source loads are from urban areas which make up 1% of the total area and the nonpoint source loads are from rural areas, mostly dairy farms.

The total population of the area is 18,000 people of which 8,400 are served by a wastewater treatment plant, the point source contributor. The MIP concluded that phosphorus reduction at the Walton wastewater treatment plant which discharges upstream of the reservoir, would only reduce total dissolved phosphorus loadings to Canonsville Reservoir by 15%.

The MIP identified rural nonpoint sources as the largest contributors to total dissolved phosphorus in the reservoir. The MIP identified barnyard and field spread manure runoff as the primary contributors to the nonpoint source loads. Barnyard controls were then proposed and implemented but the reservoirs did not respond. Therefore, runoff from manure spread fields is a much bigger problem than barnyard runoff. No one has implemented a program to control runoff.

The position taken by the State of New York relates to phosphorus removal from point sources. The New York State Department of Environmental Conservation has said that there is no evidence that point source phosphorus removal will improve the algae problem. Based on the MIP and on information from our Regional Office, we agree that phosphorus removal from point sources will not be sufficient to solve the problem unless remaining nonpoint sources are controlled.

Mr. **Green**. Thank you, Mr. Chairman.

Mr. **Boland**. Lindy, do you have any questions in this area?

DW—MISSISSIPPI RIVER

Mrs. **Boggs.** I have a general question on drinking water. Of course, the drinking water in the area that I represent comes from the Mississippi River. Although we have investigated other sources of drinking water supply, we always come back to the fact that this has to remain our major source of drinking water.

What type of programs are you engaged in that are helpful in making drinking water from a river source that receives every kind of contaminant from many thousands of miles pure and more able to be drinkable?

Mr. **Jensen.** I think there are three principal things that we do. One, obviously, is the NPDES permitting program which puts limits on the types and amounts of pollutants that cities or industries or individuals can dump into the waters, including the Mississippi.

There are about 65,000 of those permitees in the country, and I am sure many of them along the banks of the Mississippi. There are two other things. One, the national drinking water standards that are set and are then required to be met before delivering drinking water to citizens, those would be in place and would be a protection for your constituents.

Then finally, particularly in that area, the UIC program I think would have to be viewed as something that is very protective of the drinking water because there is a substantial percentage of the injection of hazardous waste into deep wells done in that area. To the extent we have that UIC program up and running it would be insurance and protection for the people who are dependent upon those resources for their drinking water supply.

Mrs. **Boggs.** Do you have any interplay with the city water and sewage board, for instance, in their activities in order to purify the water?

Mr. **Jensen.** The drinking water system there in the city would, of course, have to comply with the national drinking water standards which are set by the Federal Government and they would have to do the monitoring that is required.

So, yes, they would be involved in that program just as any other public drinking water system would be.

Mrs. **Boggs.** Does EPA still engage in any kind of program with the water and sewage board in order to assure the system uses the proper kinds of purifiers, so that in mixture with the kind of contaminants we now find in the river that it does not cause a carcinogenic effect?

Mr. **Jensen.** Again, the principal involvement of the EPA would be in insuring that the drinking water standards are met. We do not require, that I am aware—we do not set out the requirements as to how that standard is to be met.

Mr. **Barnes.** I think we may have done technical assistance on some of the problems related to problems of chlorination of water.

Mrs. **Boggs.** Chlorination was the problem.

Mr. **Ehreth.** $17 million of the $22 million that was spent in drinking water research is aimed at monitoring and engineering technology and health related technology just in the nature you are inquiring about.

Our technology studies are aimed at developing cost as well as effectiveness data on the whole range of pollutants and contaminants you already have identified. That is transmitted through, I hope, a more effective technology transfer than I accused myself of not doing so well just a moment ago.

But we do have national technology transfer seminar meetings where we have invited States as well as localities, as well as the construction engineers, the people who are really responsible for designing the plants.

We have provided technical assistance to a number of people up and down the Mississippi River to evaluate certain impacts on their drinking water systems by applying modeling and knowledge that we have that perhaps could supplement and enhance their own ability to look at those sorts of things in more depth.

Mrs. **Boggs**. There was a study done on the New Orleans drinking water problem by some of the finest experts in the field, who were within the Louisiana university systems with some of the best computer capabilities as well.

In addition to the health of our own people, it is very necessary to the health of our economy because we depend so upon the tourist trade and have had bad publicity about the carcinogenic effects of chlorinated water with the new contaminants.

Mr. **Ehreth**. A year-and-a-half ago we also completed the major technical assistance effort in New Orleans.

ENERGY PROGRAM

Mr. **Boland**. With respect to the energy program, virtually all the effort is directly or indirectly related to acid rain. The 1987 request is up $500,000 to about $60 million. If the recommendations of the joint report are followed to develop and demonstrate better technologies for power generation, what would EPA's role be in this effort?

Mr. **Ehreth**. Sir, I think I can answer that. Our role is already one of being a participant in the Department of Energy's solicitation process in the Clean Coal Technology Act. It is the Clean Coal Technology Act where $400 million has been authorized, $100 million of which was appropriated for this year. We have members on a technical review staff, as well as on the advisory committee to the Assistant Secretary for Fossil Fuel before he makes his final decisions.

That is where we are looking toward for the resources to conduct any further demonstrations. We already have in place a demonstration project in Ohio for LIMB of 105 megawatts for a wall fired boiler and we have on the street our request for proposals for demonstration of the tangential fired burner.

If necessary, we will hopefully get resources from the DOE process to fulfill the Federal share.

LIMB DEMONSTRATION PROGRAM

Mr. **Boland**. The action this Committee took last year was very much in line with the special envoy report recommendations. We shifted funds from general research to put more emphasis on solution-oriented technology, specifically the LIMB demonstration. How is that work proceeding?

Mr. **Ehreth**. As I just indicated, we have the wall fired demonstration about to break ground in September. We would be happy to invite you for that ceremony. In approximately another 45 days to 60 days we should have the request for proposals back on the tangential fired boiler of which there is $5 million allocated from Federal resources thus far.

Mr. **Boland**. Is EPA committed to both the wall fired and the tangentially fired boiler?

Mr. **Ehreth**. Yes. We have the demonstration of one in place and the other RFP on the street. I would say we are committed to demonstrating at least the first time.

Mr. **Boland**. The $5 million added last year will cover only about half the cost of the T fired demonstration. Why has the request on E-12 been cut in half from last year's level?

Mr. **Ehreth**. The resources we need for the T fired demonstration would probably have to come late this year or early into next year. As I said before, we are working currently with the Department of Energy to work out arrangements by which we could use some of those resources to fund whatever additional Federal share would be necessary.

Mr. **Boland**. Will the remaining Federal funds for the T fired LIMB demonstration come from the Clean Coal monies, the $400 million you mentioned?

Mr. **Ehreth**. It depends on some agreements we have to reach and a definition on oversight. I have already had meetings with Mr. Bougher who is the Acting Assistant Secretary for that group concerning the legality of using their procurement and purchasing mechanisms. We think that there has to be some technical management and oversight in order to protect the Federal investment.

ACID RAIN—DAVIS REPORT

Mr. **Boland**. I think I made a serious mistake, an error in judgment last year by asking that a list be printed in the record of the studies underway on acid rain. I have come to the conclusion that that request led to the demise of several hundred trees, because it took 12 pages to print—154 separate studies altogether, followed by a footnote saying more are on their way.

Isn't Drew Lewis right? We just can't continue to research this to death, can we? About the only people that say this is the Administration, that we don't have enough research in the area.

Mr. **Barnes**. Mr. Chairman, I think we would read what Drew Lewis and the Davis report had to say somewhat differently than you do.

We read that as confirming our view that additional research does need to be done on topics like source receptor relationships and so on.

We think we need to have a good idea of the relationship between what you have to reduce at a certain point in order to produce a given result at another point in this country and in other areas where I think there is some real question as to whether it is sulfur oxides that are causing the terrestrial damage or whether it is other pollutants.

We would view our position on this traditional research as consistent with that report and I think consistent with the direction we got from Congress in 1980 that we need to engage about a ten-year program to work through a number of these issues.

Mr. **Coughlin**. The Drew Lewis report, at least as I read it, indicated you could proceed with some abatement procedures at the same time you are conducting some of these additional studies. We don't have to wait another ten years before you abate anything.

Mr. **Barnes**. As we read it, his report adds another leg to the stool which says let's go forward and try to further perfect some of our clean coal technologies and put some of those in place so that we have that as we learn more about where we may need to take reductions in the future.

I think there is a difference between the program that he and former Premier Davis have recommended and the control program that many people are suggesting we should go to.

ACID RAIN—ABATEMENT PROCEDURES

Mr. **Coughlin**. I have great admiration for the way former Secretary Lewis is able to approach a problem and come to some decision. My concern is whether EPA will follow through on the Lewis recommendations?

Mr. **Ehreth**. Obviously the Clean Coal Technology Act is that leg that Mr. Barnes was referring to, Congress has provided those resources. Our LIMB technology is a little piece of that leg, if you will.

So as Mr. Barnes indicated, we are moving forward in parallel, both with the effects related research as well as the technology related research demonstration.

Mr. **Coughlin**. I have always thought the research and demonstration results are important to engage in other abatement procedures so that you could see the effect or the potential effect, of reductions in acid rain.

Are you proceeding in that direction?

Mr. **Ehreth**. It is very, very difficult to do. There is a question as to whether or not there is linearity between emission reduction and an effect downstream and one of the purposes of our research, to establish whether or not we can actually elucidate upon that particular issue.

Mr. **Green**. I thought the National Academy of Sciences had reached that conclusion.

Mr. **Ehreth**. The National Academy of Sciences went so far as to say there is a relationship between what is in the atmosphere and what is in the lake. It is very difficult to tie what is in the lake back to the emissions so that you understand the effect of a decrease in the amount. Remember, the National Academy of Science has also said emissions have been generally constant up through about—Dr. Riordan, up to about 1980?

Dr. **Riordan**. 1920 through 1980 in the northeast.

Mr. **Green**. I thought it was pretty clear that while they couldn't say it was falling on a given lake in the Catskills from a given smokestack in Ohio that there was a linearity between the overall production and insertion of acid into the atmosphere and its deposition.

Mr. **Ehreth**. I think what they are saying is that there is a relationship to what is in the atmosphere and what is in the lakes. That part is true.

I think we would agree with that sort of thing, but the linearity issue is a specific technical issue associated with emissions increase or emissions reduction and seeing that response somewhere in the receptor.

Is that not right, Dr. Riordan?

Dr. **Riordan**. Yes.

Mr. **Coughlin**. Are you saying that by providing abatement controls at the source you wouldn't get better information or the linearity issue?

Mr. **Ehreth**. Well, one of the things we are proposing to do in 1986 is begin to validate a model which is a long range transport model which will help us provide just those sorts of answers to the types of questions you are raising as to whether or not a decrease in certain sources or family of sources will, in fact, result in a certain decrease in the deposition and effects.

Mr. **Coughlin**. Thank you, Mr. Chairman.

ACID RAIN—EFFECTS TO FORESTS

Mr. **Green**. I have one further question. The West European nations have collected more data than we about the effects of acid deposition on forests. Does either the EPA or the Forest Service, have any systematic approach to collecting that kind of data?

Mr. **Ehreth**. Dr. Riordan, is our technical manager from the NAPAP program and can help us answer this, but I would like to say two things. Going back to the National Academy report you referred to they also had difficulty drawing a relationship between what is in the atmosphere and some tree effect.

The second thing is, yes, we have a joint program with National Forest Service where the National Forest Service is focusing in on field survey work and we are focusing on the research associated with fundamental mechanisms.

Can you add anything to that?

Dr. **Riordan**. In terms of keeping current with the European experience, we are actually working on many fronts. We have through NAPAP, a bilateral agreement with West Germany, by which we continuously exchange information in the area of forests.

We have another agreement with the Department of Agriculture and the sister agency in the Federal republic where scientists in those agencies directly correspond with one another and then we work for the ECE through an effects group and send a member to periodic meetings on average about every six months to review the status of information relative to acid deposition and effects.

Mr. **Green**. Do you use LANDSAT at all for this?

Dr. **Riordan**. We are not at the moment. The Forest Service has done some aerial services using photogrammetry regular photographs to assess damage to the red spruce in the northeast.

We are looking into the possibility of using some of the satellite photography for surveys, but that is only at the "everybody" stage right at the moment.

Mr. **BILL GREEN**. Thank you, Mr. Chairman.

ACID RAIN RESEARCH PROGRAM—OBJECTIVES

Mr. **BOLAND**. The current National Acid Rain Research Program was geared to reach conclusions in 1990. For the record, will you provide the specific objectives of this research in each of the six categories, like atmospheric processes, aquatic effects, and so on.

You may supply that.

[The information follows:]

ACID RAIN—SPECIFIC OBJECTIVES

The National Acid Precipitation Assessment Program (NAPAP) member agencies are in the process of developing NAPAP 1990 Objectives. The final list is expected in the next few months. The following is a list of those objectives that are under consideration for final NAPAP approval:

PROPOSED NAPAP 1990 OBJECTIVES

I. Emissions and controls

1. Produce emissions inventories for SO_2, NO_x, and VOCs (natural and man-made): Historical seasonal/regional 1900–1989; monthly by State 1976–1989; detailed by month, county, and species for 1980, and 1985.
2. Develop a comprehensive model with detailed modules for predicting emissions under alternative assumptions and establish that each component is operational.
3. Compile current summary of existing and potential control technologies and costs.

II. Atmospheric chemistry

1. Estimate with appropriate accuracy the natural background of SO_2, NO_x, O_3, NH_3, and alkaline dust in air and the corresponding pH of precipitation on a regional basis, including variation related to weather and season.
2. Produce adequate understanding of relevant chemical processes in clear air, cloud/rain scavenging, and dry deposition.

III. Deposition—Air quality prediction and measurement

1. Develop source-receptor models that will adequately estimate seasonal air quality and acidic deposition on a regional basis under alternative emission scenarios.
2. Have adequate monitoring networks in place to establish levels and trends of acidic deposition and ambient air concentrations of acidic pollutants and associated oxidants.
3. Demonstrate a system that can provide regional monitoring of dry deposition with adequate accuracy.

IV. Crops and forests

1. Provide adequate acid deposition dose/response information on selected crops in appropriate States/Regions.
2. Determine the impact of ambient levels of acidic precipitation on unmanaged soil types.
3. Establish short-term impacts of acid deposition (and associated oxidants) on the health and growth of tree plantations and natural forests over a plausible range of deposition and concentration.
4. Provide estimates of long term effects from acidic deposition and associated oxidants oxidants on key forest species, including soil, for a plausible range of deposition and concentration.
5. Identify the major factors causing visible damage to forests above cloud level.

V. Aquatics

1. Define the current chemical status of lakes and streams and establish the impact on biological life from spring runoff and major storm episodes.
2. Adequately predict surface water chemistry for plausible acidic deposition loadings.

3. Predict biological effects of various surface water chemical conditions.

VI. Materials

1. Provide a quantitative understanding of the incremental damage and economic significance of acidic pollutants and associated oxidants on sensitive materials.

VII. Economic value of effects

1. Develop methods for estimating the economic impact of effects derived from the acid substances and oxidants derived from the precursors, SO_2, NO_x, and VOC.
2. Apply the methods developed, where the incremental impact appears significant and the data base is adequate.

VIII. Program

1. Communicate credible results and an integrated assessment of the "Acid Rain issue" to policymakers and interested public.

Mr. **Boland.** On E-3, priorities seem to be established here with respect to atmospherics, materials damage, and aquatic effects. Last year the major emphasis was on forest damage.

Does this represent a real change of priorities or has forest funding just been shifted to the Forest Service?

Mr. **Ehreth.** Forest Service research still continues. What this budget reflects is that the Forest Service has their own budget for their part of the research.

Mr. **Boland.** Now, last year we had some problems with funds intended for the Forest Service and other agencies being buried in EPA's budget.

Has that been corrected?

Mr. **Ehreth.** This reflects just EPA resources, sir.

Mr. **Boland.** Do you think that forest damage will become the determining factor in bringing the U.S. to a controlled program?

Mr. **Ehreth.** I wouldn't venture that guess at the moment. There are so many other issues with the materials damages aquatic ecosystems, and all those answers have yet to be provided.

ACID RAIN—NATIONAL LAKE SURVEY

Mr. **Boland.** How many lakes are being monitored on a continuing basis under the National Lake Survey?

Dr. **Riordan.** On a continuing basis, none as of yet, Congressman. We are only in Phase II.

Phase III, which is the long term monitoring component of the program is scheduled to begin next year.

Mr. **Boland.** We understand the Canadians are putting half of their aquatic research into biological studies. Why does this receive so little emphasis in the U.S. program?

Mr. **Ehreth.** Our Phase II of our lake surveys is focusing biological studies to characterize the biological aspects of the lakes, a subset of lakes we visited in our Phase I survey.

Mr. **Boland.** And are these studies examining any aquatic organisms other than fish?

Mr. **Ehreth.** My understanding is it will be a spectrum of organisms, from diatoms to sediment dwellers to those in the water column itself.

Dr. **Riordan.** Actually, as a result of planning and review, we have pulled back and basically we are looking at the presence or absence of fish in the biological survey. The reason is primarily one of feasibility.

In order to come up with a design with the number of lakes we are looking at, we wouldn't be able to take sufficient samples to come up with reasonable conclusions about population. I might point out the reason that the emphasis has been primarily on chemistry is that chemistry is a prerequisite to having biological damage and we have attempted to get at this in an incremental fashion trying to find out if you see chemical degradation that then might be cause to look for biological degradation.

ACID RAIN—DRY DEPOSITION MONITORING

Mr. BOLAND. What is the status of the dry deposition monitoring network? How many monitors are now in operation?

Dr. RIORDAN. None are presently in operation. There are four research sites. As of this year where we have established 30 sites through 1986.

Mr. BOLAND. Okay. You many answer these for the record.

How many monitors are needed to get reliable data on dry deposition?

Will the 1987 budget add to the number of dry monitors?

Are the United States and Canadian monitors part of the same deposition network?

[The information follows:]

ACID RAIN—DRY DEPOSITION NETWORK

The ability to detect a spatial or temporal trend is determined by a complex trade-off between duration of monitoring, number of stations, their spacing, and the variations in the dry deposition itself. At present, there are very few data available, since dry deposition has not been monitored at many sites. This makes it difficult to estimate the minimum level of detection for a trend for the presently planned network. In addition, different research objectives will require different siting and density criteria for dry deposition monitoring. For example, reliable data for a watershed research project would require more stations in a smaller area than would a national or regional network monitoring trends.

In FY 1987, fifteen additional monitors will be installed.

The United States and Canada are not part of the same deposition network. The primary sources of data on precipitation chemistry in the United States are the National Trends Network (NTN) and the National Atmospheric Deposition Program (NADP). The corresponding Canadian network is the Canadian Air and Precipitation Monitoring Network (CAPMoN) which collects both wet and dry deposition data. There is close cooperation between the two countries, and the data from CAPMoN is included in the United States' Acid Deposition data bank.

INTERDICIPLINARY PROGRAM—EXPLORATORY RESEARCH

Mr. BOLAND. We will turn to the interdisciplinary program, which is proposed for a 25 percent reduction in 1987, from $20.8 million to $15.5 million. Again, this year the reduction comes in exploratory research.

For the past two years, Congress has sustained funding for exploratory research, since many people perceive a risk of EPA research becoming overly focused on regulations and standard development.

Isn't fundamental, forward-looking research important to EPA? Aren't you taking a bit of a risk in proposing a budget that proposes such a big cut?

Mr. **Ehreth**. Sir, I understand that question. It is a very, very good question. But this budget reflects a commitment to our centers program to maintain constant funding for them.

We feel there is a tremendous amount of expertise we draw upon in each of the centers. Unfortunately, it does not lead to great increases in a number of grants that we would fund. However, what we are doing in the rest of our program and our base program, so-called, we have several millions of dollars of resources there categorized or in groups, shall we say, in things like biotechnology. We are going to try to use this competitive process employed by the grants process to the maximum extent possible to enhance the scientific community's involvement in our research program.

In biotechnology this year, for instance, we are looking at approximately 20 to 25 new cooperative agreements that were solicited in the same fashion that we solicit our grants program. So, we are still using the scientific community in terms of the long-term research; and our long-term research is anything from three to five years or more.

Mr. **Boland**. Are you saying that you are expanding your exploratory research in competitive grants?

Mr. **Ehreth**. I have to re-explain that just a bit.

The budget, as is reflected here, shows a decline in the grants program, the number of new starts. The continuations will be—let me give you a specific example.

We have about 112 in 1985, the same amount in 1986, and we will have about 77 renewals in 1987, with about a dozen new starts. In the meantime, as I said before, our centers program will maintain constant. So, we are trying to supplement this by looking elsewhere in our program in areas like biotechnology or extrapolation of high dose/low dose type research.

Mr. **Boland**. The scientists are in disagreement with this, are they not? The National Research Council indicates there ought to be a substantial increase in competitive grants.

Mr. **Ehreth**. I am not sure about a statement from the National Research Council. I know our Science Advisory Board has indicated that sort of preference and that sort of feeling. We have talked to them just briefly about the idea that I was assuring to you, and they are excited about that possibility.

What it is is that they are interested in participating in our research program because, obviously, they can contribute to it. We don't want to convey to them we are not——

INTERDISCIPLINARY—CENTERS OF EXCELLENCE

Mr. **Boland**. Usually EPA comes up with a pretty good budget and fairly good legend on most of its activities. This year, that part of the budget dealing with exploratory research is a bit sketchy. Next year, we would like specifics included; for instance, how much money is requested for competitive grants, how many new grant awards and renewals will be made in 1987, how much will each of the centers get, how many distinguished scientists will be onboard, is the small business initiative program being reduced—that sort of information. Provide all those details when you bring the budget up next year.

Morgan, will you be sure this gets in here?

Last year, you mentioned that a major review of the eight centers of excellence was underway, but there is no mention of this in the 1987 justifications.

What were the results? And are some of the centers being terminated?

Mr. Ehreth. The results came from a peer review process, a scientific peer review process. And the results of that effort indicated that all of our centers were of a high enough quality, so on a scientific basis they certainly could be renewed.

The answer is no, we are not terminating their support to any extent. In fact, we are holding it constant.

Mr. Boland. What is the overall verdict on the centers? Is it satisfactory?

Mr. Ehreth. There are mixed reviews. Some are obviously much better than others, but overall the scientific review indicates all the centers are at a respectable level.

Mr. Boland. Will you supply for the record for the most recent years the number of competitive grant applications received, the number judged to have technical merit, and the number actually funded?

Mr. Ehreth. That information is available.

[The information follows:]

Numbers of Competitive Grant Applications Received, Judged to Have Technical Merit, and Actually Funded

The following chart displays, for fiscal years 1982 through 1985, the number of new competitive grant applications received, the number judged to have technical merit (that is, to have passed scientific peer review), and the number of new grants actually funded.

	1982	1983	1984	1985
Applications received	388	310	289	414
Applications judged to have technical merit	125	104	84	122
Applications funded	61	45	64	57

RISK ASSESSMENT

Mr. Boland. Last year, we spoke of a major effort to develop standardized risk assessment guidelines. Those guidelines were to undergo Science Advisory Board review last April.

Have they now been finalized?

Mr. Ehreth. Yes, sir. Five of those guidelines have been finalized, and they are in the process of being reviewed in the agency right now.

Mr. Boland. What happened to the interagency risk assessment group started in 1984? After Mr. Ruckelshaus left, Mr. Goldstein then took it over. I know he is gone. Is that group still active, and who is the chairman?

Mr. Ehreth. That group is no longer active, to the best of my knowledge.

Dr. Moore might be able to help us on that.

Mr. **Moore**. The group you refer to is no longer active. What we now have in place is more of a staff level interchange between EPA and some of the traditional regulatory agencies, such as FDA or other parts of HHS, and CPSC.

R&D LAB STUDY

Mr. **Boland**. What about the sizable study EPA did last year on R&D field laboratory structure? There is little mention of it in this justification.

Mr. **Barnes**. We did a study of R&D our labs connected with programs in the regions. We concluded that study. We have had some discussion with the Office of Management and Budget on it. I think we are still continuing—Howard, do you want to be more specific there?

Mr. **Messner**. By and large, we concluded that there are needs for some new facilities. There are needs for some strengthening of the relationships among the labs. But we are not planning any major changes in the deployment of our laboratories.

There are one or two smaller opportunities for consolidation, and we are going to sit down and talk about the timing of doing that. But nothing that would be very great, Mr. Boland.

Mr. **Boland**. For the record, would you briefly summarize the study's conclusions and recommendations in this area?

[The information follows:]

Study of R&D Field Lab Structure

Our study concluded that initial consolidations affecting EPA laboratories in Leonardo, NJ and Monticello, MN should be considered for implementation by the Agency. The research programs would be consolidated elsewhere and the facilities could be transferred to other Federal and State agencies or to universities and would provide benefits to these institutions.

This recommendation is based on an evaluation of both our Regional and our Research laboratories. We reviewed detailed information on personnel, programs, property, and the cost involved in such consolidations. We also considered the ease of implementation and the steps and timeframes required to accomplish the consolidation. These two consolidations represent targets of opportunity that can be addressed in the near term.

Barring unforeseen impediments or unusual difficulty in leasing space, the time to implement any of these moves should not exceed four months.

Mr. **Boland**. The 1987 budget is not impacted as a result of that study, I take it?

Mr. **Messner**. It is not.

INDIAN POLICY PROGRAM

Mr. **Boland**. On page I-20, the Indian program is mentioned, but the discussion seems a bit vague. Just what is EPA's Indian program?

Ms. **Manson**. The EPA Indian policy was adopted in 1984, and it indicated EPA would deal with the Indian tribal governments government-to-government rather than subsets of the States or municipalities. As a result, in the Office of Federal Activities we have a small coordinating staff that deals with the focus of training and getting environmental capability available to the proper governments, in addition to encouraging our programs to start managing and operating their budgets with respect to tribal needs.

We are, in addition, conducting some environmental surveys at this point to determine the nature of environmental needs on tribal lands.

Questions Submitted for the Record by Congressman Sabo

INDIAN POLICY

Question. In November 1984 your agency established an American Indian Policy, but I am unclear as to whether you have made any real progress in this area. You are conducting a national survey of environmental conditions on Indian lands. Is that correct? Will this study be completed in June, as has been our understanding? Do you have any observations to make about environmental conditions in Indian country at this stage of the process?

Answer. EPA, through Americans for Indian Opportunity, Inc., is conducting a survey of approximately 60 reservations across the country. We are collecting data from the tribes, the Indian Health Service, and EPA regional offices. We anticipate that the survey will be completed by June, 1986. We think that it would be inappropriate to comment on environmental conditions until the survey is complete.

Question. This committee has urged your agency to form an Indian legislative working group to take a look at the relationships between tribes and the various levels of government with an eye toward investigating the need for changes in EPA statutes. Have you made any progress on this front?

Answer. Substantial progress has been made in identifying the need for changes in EPA statutes. Amendments relating to Indian tribes were submitted as part of the Administration's legislative packages for both the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Clean Water Act. These amendments clarify the authorities and responsibilities of the Indian tribes and authorize EPA to deal with tribes on a government to government basis. We believe we have a viable approach for the remaining statutes, and that our regulatory development process will provide an effective process for ensuring tribal input. In addition, several of our on-going pilot projects address the relationship between the various levels of government; information collected from these projects will be shared with other tribal governments. We are submitting for your review two publications which will provide more detailed information on our Indian activities. They are "Interim Strategy For Implementation of the EPA Indian Policy" and "EPA Activities on Indian Reservations: FY85."

NEPA COMPLIANCE ACTIVITY

Mr. BOLAND. Looking at the bottom of I-20 with respect to the 1987 program request, the last sentence on that page is, ". . . the decrease reflects a reduction in NEPA compliance activity."

What is that all about?

Ms. MANSON. That deals directly with the construction grants program. The Administration bill for the Clean Water Act, as you know, does not provide for new starts. Commensurate with that, we would not have the EIS's for new construction.

Mr. BOLAND. If the construction grant program was increased to $2.4 billion with new starts remaining eligible for funding, would these resources have to be increased?

Ms. MANSON. We would certainly have to take a look at the budget again, sir, and consult with our budget people and get back to you.

Mr. BOLAND. All right.

On I-23, we see that the request for interdisciplinary training grants has been zeroed. Why?

Mr. KINGHORN. I will have to provide that for the record, Mr. Chairman.

Mr. BOLAND. The next page mentions that the 1986 congressional add-on is being used "to begin the phase-out of this program."

What does that mean? Congress added funds to continue the program, not to phase it out.

Mr. Kinghorn. I will provide that for the record.

Mr. Boland. Give us a nice answer in the record for that one.

Mr. Messner. We will provide that.

[The information follows:]

Interdisciplinary Training Grants

The Agency is requesting no resources for this program in FY 1987. This program has in the past been funded as part of Congressional add-ons for Academic Training in the Abatement, Control and Compliance appropriation. In view of the constraints imposed by the Gramm-Rudman reductions and the many statutory requirements we must meet, we did not feel that funds could be allocated to this program, which does not directly support EPA's regulatory mission.

This program is not being phased out in FY 1986. Funds appropriated by Congress in FY 1986 for Interdisciplinary Training Grants will be used, as in previous years, to provide fellowships and training grants to students pursuing studies in the environmental sciences.

INTERDISCIPLINARY—CRIMINAL ENFORCEMENT

Mr. Boland. On I-30, the first couple of paragraphs indicate that resources will continue to be shifted within the enforcement program to increase criminal enforcement.

Is that program fully operational in each region?

Mr. Mays. Yes, it is. We have at least one or two—actually two criminal investigators in each region.

Mr. Boland. How many criminal investigators are there in the regions now? Also, what are you requesting for 1987?

Mr. Mays. There are 35 criminal investigators in the regions at this time, including supervisory personnel. We are requesting another 7.1 FTE for the criminal program.

Mr. Boland. And will you update for the record the criminal enforcement figures provided for the record last year on page 174 of the hearings?

Mr. Mays. Yes, sir.

[The information follows:]

Criminal Enforcement

Comparison of the past four years of operation show steady growth in activity:

	1982	1983	1984	1985
Cases referred to DOJ	20	26	31	36
Cases filed by DOJ	7	13	16	20
Defendants charged	14	34	36	35
Successful prosecutions	7	12	14	19
Defendants convicted	11	28	26	29

Mr. Boland. We will turn to I-33. The justification states that there is likely to be a significant increase in criminal activity due to the provisions of the RCRA amendments. I would tend to agree with that statement because as waste treatment disposal becomes more expensive, the incentives to cut corners are increased.

The question is, why do we see a comparable increase in staff in the basic RCRA enforcement program? The same forces are at play, really, aren't they?

Mr. Mays. Yes, sir. We are increasing the staff somewhat over the last fiscal year because part of our thrust in the criminal program is to help train some of the State enforcement personnel to develop criminal cases there.

I think it is important the States take over a large portion of this, because they have far more resources than we do.

Mr. Boland. Bill, do you have anything in this area?

ENFORCEMENT RESOURCES

Mr. Green. I would like to follow on that last comment. It has taken me a while to get the environmental people up in my state to understand that the resources that this Committee deals with are limited under the 302(b) allocation. They finally seem to have gotten the message.

What they said to me this year was they accepted that this is a world of limits in money as well as in environmental resources, and they thought the highest priority ought to be given to the enforcement and monitoring area.

I would like you to comment on that. They felt this was the weakest part of the EPA operation and felt it needed much more in the way of resources, and they would be prepared to see cuts elsewhere to provide the resources.

Mr. Mays. Well, this is one of the areas where we are actually gaining some resources. I agree with them that enforcement is one of the major functions of the agency. Our enforcement program over the last three years has increased dramatically, judicially as well as administratively. We have had 300 percent increase in our administrative program; a 100 percent increase in our judicial enforcement program.

I think the States are certainly carrying their part of the load. A lot of these programs are delegated to the States under the direction in the various statutes under which we operate. With those delegations goes the primary obligation to the State to administer and to enforce the programs. So, I think that they have the primary obligation to do that, although we have an oversight role in making sure they do that, and we will step in if the States fail to take appropriate action to enforce their own laws.

Mr. Green. How often did you have to do that last year?

Mr. Mays. I don't have an exact number, but we do it frequently.

Mr. Green. Could you supply it?

Mr. Mays. Yes, sir. I will do that.

[The information follows:]

EPA Enforcement in Delegated States

In reviewing the FY 1985 summary of EPA and State Enforcement Activity, it appears that approximately 30% of all formal enforcement actions (AOs and civil referrals) for delegable programs (i.e., excluding CERCLA and TSCA) were taken by EPA. (Note: No State data available for the PWSS program.) This percentage does not vary much by program—EPA took the action in 27% of the Air and NPDES actions, 32% of the RCRA cases and an estimated 30% of the FIFRA cases.

These data are not collected in a manner which allows us to distinguish cases in which EPA acted because a state failed to do so. In addition, there are factors which make clear interpretation very difficult.

First, EPA enforcement action in a delegated State may occur for several reasons:

The State fails to take "timely and appropriate" enforcement action (only these cases can be termed "overfiling"—cases in which the State has started the action and we step in);

The State requests EPA to take the action for a variety of reasons;

A program or legal precedent case;

Follow-up to EPA cases, i.e. when a source violates an EPA order or consent decree, EPA will take followup enforcement action even if the State has subsequently taken delegation.

Second, the new guidance on "timely and appropriate" enforcement response is likely to affect the historical relationship.

As part of the State/EPA Enforcement Agreements process started in FY 1985, each program has defined what constitutes a timely and appropriate enforcement action, and establishes timeframes which apply to both EPA and the States for initiating and escalating enforcement actions against significant violators.

As a result of the "timely and appropriate" guidance taking full effect in FY 1986, we have anticipated that there would be an increase in EPA's direct enforcement actions initially. Over time, as both EPA and the States follow the timeframes we expect to see increased voluntary compliance in response to the more effective Federal-State partnership.

Mr. **Kinghorn**. Mr. Chairman and Mr. Green, also, of the increases that the Committee provided us last year, the Administrator and Deputy directed that 47 of those in the enforcement area be put in enforcement counsel. While the RCRA media does not go up dramatically in 1987, reflecting resources we got last year, a large portion of the resources we have in 1986 that have just been added and will be carried over into 1987 will very likely be for RCRA enforcement in the Regions.

Mr. **Green**. Thank you, Mr. Chairman.

MANAGEMENT AND SUPPORT

Mr. **Boland**. We will turn to management and support. The request in 1987 is $295.8 million. That is an increase of $20.2 million above 1986, or about 7.3 percent.

I understand there are no pay raises factored into these figures.

How do you justify this increase in management and support, which is well above the 3.5 percent inflation?

Mr. **Messner**. Mr. Chairman, we have two parts to that $20 million increase. About half the increase is for rent and utility costs which we have in the agency as a whole, over which we have relatively little control. It also includes some other increases.

Specifically, rent went up $4 million in our estimates. The telephone usage and service contracts went up about $3.3 million. When you add up these relatively straightforward increases, they account for half of it. The other 50 percent of that increase will be used for expansion of our ADP program, our computer upgrades of three of our regional offices.

As you know, in the past two years this committee has helped us modernize not only our IBM mainframe computer equipment, at Research Triangle Park, but also to help us start modernizing our regions. We have requested almost $4 million in funds for that purpose.

We know it is a tight year. We fought very hard in front of the OMB and the President to get those funds included in this budget, because without good data handling, we can't do our mission. So, a good piece of it is for that function.

We also have almost $2 million in this budget to modernize our financial management systems in concert with OMB's circular A-

127, this is an effort to better incorporate common sense and good management practices as part of the Government's financial management systems.

So, we know it is a very tough year. The management accounts have been reduced by almost 60 FTEs for 1987, and that is the second most severe reduction in the whole agency's manpower area. But in these dollar areas between the "have to pay the rent and postage" and the fact that we really want to take advantage of modernization, we think it is a good investment for the country.

MOTORPOOL

Mr. **Boland**. With respect to automobiles, you had a little controversy. There was some story in *USA Today* about automobiles.

We have been in the middle of the debate on automobiles for years around this place. I haven't always agreed with the position taken on the Senate side in years gone by. I don't know whether we agree with it now.

Anyhow, just let me ask you for the record to indicate what the controversy is; is the Inspector General satisfied with the changes that have been made? And provide for the record the information on the cost per trip, lunch time use of the car, personal business, et cetera, and whether or not EPA has any data comparing EPA to other Federal agencies.

Mr. **Messner**. Mr. Chairman, we don't have that data immediately available, but if I could just say very briefly, the Inspector General and I have looked at this issue very carefully. I think you will find in the report that we provided you, that you are satisfied that we are very much in control of this situation.

Mr. **Boland**. Do you have any other information with regard to the size of the Washington motor pool vis-a-vis other agencies?

Mr. **Messner**. Yes, sir. I can develop it for you. We have six vehicles, and we will be glad to provide information on it.

EPA Motor Pool Usage

A review of EPA vehicle use in October 1985 indicated that 90% of all trips were to or from official government offices and the remaining 10% was equally divided between restaurants/hotels and train station/airports. In all cases the vehicle use was for official business and not personal business. The average cost per passenger trip is approximately $9.30.

In an effort to compare the size of our Washington motor pool with other agencies, we conducted a telephone survey which revealed the following information:

Department/Agency	*Washington Motor Pool*
Health and Human Services	22
Interior	21
Treasury	12
Environmental Protection Agency	6
Transportation	6
Labor	6
Housing and Urban Development	5
Veteran's Administration	4

M&S—CONTRACTING RESOURCES

Mr. **Boland**. Last year, you acknowledged that contracting officers were overworked, and you indicated work years needed to be increased to meet the growing workload.

How much did you augment the contracting staff in 1985 and in 1986?

Mr. **Messner**. A total of 26 workyears, Mr. Chairman. We put them primarily into our contract administration function.

In the 1987 budget, we are anticipating a slight reduction in our total procurement force of about 10 workyears. That is not going to be taken out of the contract administration; that is a reflection of the fact that the number of contract placements is anticipated to be less.

Mr. **Boland**. So that reduction doesn't mean you will be moving in the opposite direction?

Mr. **Messner**. No, sir. I hope we are going to be consistent. We worked hard to recruit a fine staff for contract administration.

IG REPORT ON CHEMICAL INFO SYSTEM

Mr. **Boland**. Now, the IG caught one contract overcharge on the Chemical Information System of about $1 million. What was the problem there?

Mr. **Messner**. Well, that is about a three-year-old study, and the IG questioned almost $1 million, as you say. Out of that million dollars, the contractor has been able to prove that he is entitled to about $800,000. There is still a quarter of a million dollars left, and the Office of General Counsel is looking over that quarter of a million dollars. It is a profits issue.

When I came back to the agency three years ago we took a look at the Chemical Information System and decided the private sector could do that. We sold it off to two firms that are now providing very adequate service, not only to us but to others, at a reduced cost to the Government.

IMMEDIATE OFFICE OF THE ADMINISTRATOR

Mr. **Boland**. Okay, on MS–21 why do workyears in the immediate Office of the Administrator—the second to the last sentence on this page—increase from 33.3 to 43.3 FTEs in 1986?

Mr. **Barnes**. Mr. Chairman, that is essentially a truth in accounting adjustment there. In fact, I think we have five fewer people in the immediate office of the Administrator than we had when Lee and I came in a little over a year ago. But it was clear to us, looking back, that since at least 1980 the level in that office has been in the 45 to 50 range, and we thought that it was better to reflect that on the record, make the adjustment, than have a lot of people in there on detail.

Mr. **Boland**. What is your total workforce in EPA?

Mr. **Messner**. 13,000.

Mr. **Boland**. Is Lee sure he can really manage 43 in the front office?

Mr. **Barnes**. I think some of that, Mr. Chairman—I think you need to look at who is there. For example, it includes about eight people performing the judicial officer function. That is one that has grown from two to eight over the last couple of years. The judicial officers ask, for example, to review civil penalty appeals so I think there aren't 40 people sitting right around the door of the Administrator.

SCIENCE ADVISORY BOARD

Mr. **Boland**. On MS-28, there is an indication that in 1987 the Science Advisory Board will review 64 issues. That is 10 more than in 1985 and in 1986.

Any particular reason for this increase?

Mr. **Barnes**. Mr. Chairman, increasingly we are finding that we take increased confidence in having our major decisions and actions sent out for external peer review in the scientific community.

Mr. **Boland**. Now, some people believe the Science Advisory Board is spread so thin many of their reviews are only perfunctory and paper thin.

What about it?

Mr. **Ehreth**. I can attest for the research and development perspective they are extremely intensive and exhaustive. All of our documents that were prepared for the hazardous air pollutant program and the air programs go through that process very extensively.

Our documents that support Mr. Potter and his NAAQS program are also reviewed extensively and several of the pieces of work that come out of our research program. As a matter of fact, they also are looking at at least six to eight issues a year of our ongoing research program. They dedicate an awful lot of time and energy to this.

I would say it was anything but that. They put an awful lot of effort and conscienciousness into that.

Mr. **Barnes**. We are in the middle of an exercise to try to increase the quality of the record and the paper we give to the SAB to look over so they can do their work in a more expeditious fashion.

Mr. **Boland**. Are you piling too many reviews of issues on one person, too much detail?

Mr. **Barnes**. No.

Mr. **Ehreth**. It has increased. I believe the board has also increased in size and they have that access to consultants and to the subcommittee structure, and they have used that extensively to meet the demands.

Mr. **Barnes**. We have had areas like biotechnology, radiation pop up, and it was clear we were going to need extensive work done, and we have had new panels created to do those reviews.

Mr. **Ehreth**. That is right.

Mr. **Boland**. What about the risk that the Science Advisory Board may become so busy that it just accept the agency's assumptions and serves as little more than a rubber stamp for the EPA?

Mr. **Ehreth**. I can't see that as happening. It hasn't happened to date, and I don't see any indication that something like that will happen. These are very, very eminent scientists in their own right and renowned in their own right, and they just would not tolerate that sort of thing.

Mr. **Boland**. One of the reasons I ask is, there is some indication that many issues are reviewed in detail by one person.

Mr. **Ehreth**. The issues I take before the Science Advisory Board generally go before a committee sitting in front of—we actually have a panel convened in which we provide the briefing material to, as well as the physical briefing itself.

I am not aware of that sort of condition existing at all.

Mr. BOLAND. Will you provide for the record a list of the 1986 issues that have gone before the SAB?

Mr. EHRETH. Certainly.

[The information follows:]

FISCAL YEAR 1986 SCIENCE ADVISORY BOARD ISSUES

Following is a list of 59 issues reviewed or scheduled to be reviewed by the Science Advisory Board. It is expected that the Board will review 5 to 10 additional issues as well as those identified here.

Risk Assessment Guidelines for Carcinogenicity, Mutageni-city, Developmental Effects, Complex Mixtures and Exposure Assessment (5 issues).
Report to the Administrator on a Preliminary Review of the Agency's Existing Research and Risk Assessment Capabilities Associated With the Field Application of Genetically Engineered Organisms.
Research Review on Forest Effects.
Research Review on Dioxin.
Research Review on Extrapolation Modeling.
Research Review on Indoor Air Pollution.
Research Review on High Hazard Waste.
Research Review on the Integrated Air Cancer Project.
Research Review on Water Quality Implementation.
Research Review on Environmental Risk Assessment.
Scientific and Technological Achievement Awards Review.
Review of EPA Assessments on Beryllium and Nickel (2 issues).
Review of Criteria Documents for Recommended Maximum Contaminant Levels for Drinking Water (5 to 7 issues).
Report on the Health Assessment Document Review Procees.
Review of Draft Health Advisories for 37 Compounds.
Review of Water Quality Criteria for Dissolved Oxygen.
Review of the Relative Risk Coefficients for Radon.
EPA Radiation Research Needs.
Low-Level Radioactive Waste Disposal Standards.
Radionuclides in Drinking Water (5 issues).
Radon Review on Epidemiology and Mitigation in Drinking Water (2 issues).
Review of Technical Criteria for Establishing Alternative Concentration Limits.
Review of Ground Water Monitoring Enforcement Guidance.
Review of Regulations for Ocean Dumping and Reuse/Disposal of Sewage Sludge.
Review of Definition of Ground Water Vulnerability.
Review of National Ambient Air Quality Standards (NAAQS) for Lead, Ozone, and Particulates.
Review of Research Needs for Lead and Ozone (2 issues).
Review of the Welfare Effects of the National Ambient Air Quality Standards (NAAQS).
NO_x Review for the Consumer Product Safety Commission.
Review of Methodology for Assessing Materials Damage from SO_2 and Acid Rain.
Review of a draft document entitled "Preliminary Assessment of Health Risks to Garment Workers and Certain Home Residents from Exposures to Formaldehyde."
Resolution Concerning Superfund Expenditures.
Report to Senator David Durenberger presenting SAB Comments on Amendments to the Safe Drinking Water Act enacted by the House of Representatives and the Senate as they pertain to the additional scientific review responsibilities envisioned for the SAB.
Report to the Administrator on Health Effects Information Relating to Particulate Matter That Has Become Available Since the Committee's Last Official Review.
Review of the Office of Environmental Engineering and Technology's Five-Year Research Plan.
Report to the Administrator on the Creation of An Advisory Committee to Provide a Continuing Independent Review of the Technical Adequacy of Risk Assessments Prepared by the Agency Before Granting Experimental Use Permits.
Report to the Administrator on a Review of the Proposed Fiscal Year 1987 Budget for the Office of Research and Development.

Review of Permit Writers' Guidance Manual for the Location of Hazardous Waste Land Treatment, Storage and Disposal Facilities.
Review of the Superfund Innovative Technology Evaluation (SITE) Program.
Municipal Waste Combustion.
Integrated Environmental Management Program.
Stratospheric Ozone Assessment Document.

ADMINISTRATIVE LAW JUDGES

Mr. BOLAND. On the next page, there is an indication that the administrative law judges are also staying very busy. Cases increased from 765 to 880, from 880 to 1,100.

Will the backlog be increasing here?

Mr. BARNES. Mr. Chairman, there is an area we plan to keep a very close eye on in terms of what is happening in the processing of those cases. I think that if we see that backlog developing, we will want to shift some resources within our Administrator's office to deal with that, and then reflect that and the subsequent budget request to you. That is an area that is of concern to us, as well.

OFFICE OF THE INSPECTOR GENERAL

Mr. BOLAND. On page MS-31, the table shows that the Inspector General's Office will get more money in 1987, but fewer people.

How about the IG? Is he satisfied with 222.4 workyears? Are you happy with that?

Mr. MARTIN. Mr. Chairman, our office requested approximately 43 FTEs and $2.8 million additional in 1987. That position was supported by the agency. With the restraints of the current budget situation, we were not successful in receiving the additional resources.

Mr. BOLAND. On MS-33, fourth from the bottom of the page, there is an indication steps were taken in 1985 to strengthen State grant procedures to insure the States maintain their level of effort. You really couldn't accomplish that, could you, under a block grant approach?

Mr. BARNES. Mr. Chairman, that is one of the issues that we have some concern about, and that before we actually come forward with any block grant legislation we want to make sure we have worked through those issues and can satisfy ourselves that we would be able to reflect the appropriate Federal interest in seeing that those funds go to the purposes that they were intended. That is one of the issues we really have to work through before we could come out with legislation.

FACILITY COSTS

Mr. BOLAND. One other management issue deals with facility cost—the question of facility leasing versus purchase. In all EPA facilities, what is the approximate split between government-owned and privately leased space?

Mr. MESSNER. Mr. Chairman, our agency is pretty well rented out. We have about 80 percent of our space under lease. It is a little better in the laboratories. There we have about 69 percent rented. So the majority of our agency is leased, and it is something that we have been paying a lot of attention to in the last year or two.

It is hard to get the money, as you can imagine, for construction of Federal facilities.

Mr. **Boland**. What is EPA's experience with respect to its thoughts on purchasing facilities, the advantage it provides over leasing it?

Mr. **Messner**. I think there is no question in most cases the purchase of a facility would repay itself over time. And, as you know, the Executive Branch has a formula, a very tedious formula, to go through. We have applied that formula to places like our facilities at Research Triangle Park.

We have, as you know, a lease expiring up in Ann Arbor, Michigan, at our facility. We will apply it there.

Usually, it shows that if you can afford to come up with the money either at the front end or work out some kind of deal with the builder to pay off over time, you are a lot better off when the Government owns the facility.

Mr. **Boland**. Could you come up with a comparative cost on the Ann Arbor facility?

Mr. **Messner**. We could. We don't have it yet, but we could. We will, because we have to decide whether to renew that lease or not.

Comparative Cost of the Ann Arbor Facility

The lease for our Ann Arbor facility expires in August 1991. Well before then we will do a cost analysis to determine whether we should continue to lease, buy, or build. We will go through the OMB provided analysis very shortly and provide you with the cost comparisons as they now appear.

Mr. **Boland**. Is this issue entirely up to GSA, or does EPA play a role in this?

Mr. **Messner**. We play a great role, and so does GSA. But the issue is essentially up to the OMB, because after you do the economic analysis and the architectural engineering analysis, you still have to generate large quantities of dollars to do the construction, and that has proven to be an increasingly serious matter in the last decade.

Unless some solution is found for it, the Government is going to continue to pay leases, and they are going to continue to pay heavy costs for that approach.

CONTRACTS WITH CEQ

Mr. **Boland**. One of the ironies of Gramm-Rudman about which you probably would agree is, we may not be able to afford what is in the Government's best interest. Apparently, the Policy Office relies on CEQ to contract for a number of EPA studies.

Why is this being done?

Mr. **Russell**. Milton Russell, Mr. Chairman.

CEQ did do some studies, some contract work for us previously. I have not checked recently, but I do not believe that there are at present any contracts being serviced by CEQ.

Mr. **Boland**. I am sure you would not want the CEQ to get involved in issues that are entirely within the EPA's jurisdiction.

Mr. **Russell**. No, sir. But issues that CEQ has worked with us on are more generic issues having to do with research, having to do with analysis, and they are not having to do with matters within the discretion of the Agency.

FEES COLLECTION PROPOSAL

Mr. **Boland**. What about the fees for pesticide registration and hazardous waste training?

Mr. **Messner**. You are referring to the proposal that perhaps we could collect a fee?

Mr. **Boland**. Yes.

Mr. **Messner**. We have a task force that Morgan Kinghorn is chairing that is looking at every possibility for both fees on our regulatory program or even fees on some of the services we provide. We have involved State agencies, and we are going to present some choices and options to the Administrator and the Deputy Administrator.

We have promised the OMB that we would take a look at it. It is one of their major initiatives government-wide, and we are doing just that, Mr. Chairman. We haven't made any decisions yet.

Mr. **Russell**. May I make a correction? I have just been informed there are a couple of contracts at CEQ that are still in force during fiscal year 1986. I will supply for you for the record what those contracts are.

Mr. **Boland**. All right.

[The information follows:]

FY 1986 Contracts With CEQ

In FY 1986, the Office of Policy, Planning and Evaluation (OPPE) has prepared three interagency agreements with the Council on Environmental Quality (CEQ). OPPE controls these projects, directs the tasks to be performed, and reviews the products. OPPE then incorporates these products into its own studies.

An agreement for $125,000 supports the Regulatory Negotiation Project. OPPE found that the most expeditious manner in which to commence this project back in 1983 was to use some of the talented contractors CEQ had available. To retain consistency, OPPE continues to use these contractors to help screen potential candidate negotiation items; assemble proper mix of participants; facilitate negotiation sessions; provide pre-negotiation training; document the project's progress; analyze project learnings; and prepare recommendations regarding what, if anything, to recommend by way of institutionalization.

A second agreement for $37,000 is a joint effort between OPPE and CEQ to establish technical and policy communication workshops to evaluate proposed policies aimed at resolving significant environmental issues. OPPE is using CEQ's contractor support as well as looking to CEQ to coordinate it with its current research on Federal environmental and public health policies and with other Federal agencies and programs that would be affected by conclusions or recommendations as CEQ is impowered to do under The Environmental Quality Improvement Act, Section 203(d).

Lastly, OPPE is using CEQ's technical expertise and contracts to develop methods to classify selected inert ingredients in pesticide formulations according to their essential use properties so that use of the least "risky" in each classification can be encouraged. The purpose of this $40,000 investigation is to determine the likely substitutes that industry could use when the Agency begins to regulate inert ingredients of toxic concern.

BUILDINGS AND FACILITIES

Mr. **Boland**. We will turn to buildings and facilities, and the request is for $5 million. That is all for repairs and improvements in the facilities.

Page BF-5 indicates in 1986 design work is proceeding on five projects. Funds were provided in 1985 for the full construction cost of the radiation lab in Alabama.

Are construction funds available for each of the other four facilities now under design?

Mr. KINGHORN. No, Mr. Chairman.

Mr. MESSNER. No, Mr. Chairman. We have funds for the Montgomery laboratory. That is being designed and should go under actual construction by the end of this year. We have funds set aside for the design of Newport, Oregon, and we just finished the analysis necessary to decide to go ahead with that design. But there are no construction monies for it.

The other projects I don't believe have any money associated with them.

Mr. BOLAND. Will you provide for the record the cost estimates for all unfunded construction projects?

[The information follows:]

COST OF UNFUNDED CONSTRUCTION PROJECTS

EPA is proceeding with the design for five projects. The current status of construction funding is as follows:

Radiation Laboratory in Montgomery, Alabama.—Construction funds were appropriated in FY 1985.

Wildlife Toxicology Facility, Corvallis, Oregon ($720,000) and the Pollution Abatement Facility, Narragansett, Rhode Island ($402,000).—After appropriate Congressional notification, construction funds have been made available by reprogramming money from the Repair and Improvements (R&I) program element to the New Facilities element. Both of these projects are currently under construction.

Full Containment Facility, Cincinnati, Ohio.—We have reprogrammed $98,000 from R&I to New Facilities for design of this facility. The project started out as a renovation of the sixth floor of the existing laboratory, but the safety and environmental concerns dictated that EPA build a separate structure. We are now in the process of preparing an Environmental Impact Statement for the proposed facility. We estimate $1,650,000 will be necessary to construct the Cincinnati facility.

New Laboratory, Newport, Oregon.—Design funds were appropriated to EPA in the FY 1985 Supplemental Appropriation ($500,000). No firm estimate has been made regarding the construction costs of this facility.

B&F—NEWPORT LAB

Mr. BOLAND. A statutory limitation was placed on the 1985 design funds for the Corvallis lab. Did EPA determine that the construction of a new lab at Corvallis would be cost-effective?

Mr. MESSNER. Are we talking about Newport, or are we talking about Corvallis?

Newport? Yes, I think it was Newport, Mr. Chairman, and we did. Within the week the Administrator indicated he wanted to go ahead with the actual design monies for Newport.

Mr. BOLAND. Newport. All right.

From the standpoint of efficiency of the agency's overall research program, is a new Newport lab justified?

Mr. EHRETH. If we were to rank all of our needs at any time other than current budgetary conditions, I don't think we would rank that particular facility the top of the heap.

Mr. KINGHORN. We have not requested any funding for construction.

LAB CONSOLIDATION

Mr. **Boland**. This committee understands that one of the problems in EPA's research program is too many field labs—a proliferation of small research facilities.

What about good management? Wouldn't it dictate consolidating small labs instead of building new ones?

Mr. **Messner**. If I could take a crack at it, everybody has their own view on this, Mr. Chairman, in the agency. We did look at every possibility. It costs money to consolidate. It would cost money not only to move these laboratories but to build a new one to move them to, and at the present time it just didn't seem cost-effective. We don't have empty space.

Mr. **Boland**. In the long run, would they be cost effective?

Mr. **Messner**. A facilities argument could be made that in the long run consolidation is more efficient. I know you know of our facility in Cincinnati that we built back in the 1970s. We consolidated quite a bit there, and it is a first rate facility. I think a series of facilities like that would well simplify the management problem.

Don Ehreth has been in this agency as long as I have. Maybe he would like to add to that.

Mr. **Ehreth**. I think you said it ably. That is true. There are certain conditions you have to deal with in working with environmental processes, and it is nice to have your laboratories close by. But for the most part, we have a national program, so we can reach out across the country and still manage the program from that facility.

B&F—REPAIRS AND IMPROVEMENTS BACKLOG

Mr. **Boland**. Last year, you indicated a backlog in repair projects of $14 million to $15 million. Assuming that the $5 million funding is provided in 1987, how much will the backlog be reduced by the end of next year?

Mr. **Messner**. Very little, Mr. Chairman. After you asked that question of me last year, I went back to find out if this was a never-ending pot. It is. We took some samples from the private sector of what it costs to maintain facilities, and the maintenance level for as many facilities as we have is going to be a continuing burden to this agency. So, if we are going to keep our facilities in good shape, we are going to be sitting at this table and asking you for the repairs and improvement monies every year necessary to keep them running.

So we are eating into some of the historic problems. But as the years go on, our facilities need further work. So I don't want to promise we are not going to come forward when I know we are.

Mr. **Boland**. Last year's budget indicated that just over $5 million would be spent on repair and improvement projects. But page BF-4 shows that only $3,594,000 was actually obligated in 1985.

What about this?

Mr. **Messner**. We had a history in the agency of not expending the money. We put together a group of program people to work with us on how that money should be expended. We had a pretty good record. I thought that we had spent more than that amount in 1985, but I will check the record and provide you a better answer.

Mr. Boland. Take Morgan to lunch. You can find out what you actually spent.

Mr. Messner. Good idea.

[The information follows:]

FY 1985 Repair and Improvements Obligations

EPA's 1985 Repairs and Improvements budget estimate of $5,100.0 thousand was gradually reduced throughout the year due to a series of reprogrammings to our New Facilities program, each of which received Congressional approval. Consequently, $4,199.4 thousand was the amount actually available to us to spend on Repairs and Improvements. Of that total, we spent $3,593.7 thousand or 86% in 1985. The following describes the changes that occurred in the R&I budget during 1985 to account for the difference from last year's budget estimate to the final budget for 1985.

President's Budget for FY 1985	$3,600.0
Congressional Add-on to FY 85 R&I Budget	+1,500.0
Total	5,100.0
Carryover Funds Available	+355.9
Total	5,455.9
Transfer to New Facilities Program for construction of Hazardous National Storage Facility in Denver, Colorado	−47.5
Total	5,408.4
Transfer to New Facilities for design and construction of a Pollution Abatement Facility at our Environmental Research Lab (ERL) in Narragansett, RI	−350.0
Total	5,058.4
Transfer to New Facilities for construction of a wildlife toxicology facility at Corvallis Oregon (650.0K) and design monies for a full containment facility at Cincinnati, Ohio	−748.0
Total	4,310.4
Transfer to New Facilities for additional costs for continuing new construction in Corvallis, Oregon and design and construction in Narragansett, R.I.'s ERL	−122.0
Total	4,188.4
Obligated (86%)	3,593.7
Balance	594.7

Mr. Boland. Are you confident and comfortable with the $5 million provided in 1986 and the $5 million provided in 1987, that they can be fully obligated?

Mr. Messner. Yes, sir; I am.

Mr. Boland. That comes to the end of a perfect day. That is the end for these programs. We will have Mr. Thomas here tomorrow, I understand.

We will adjourn until 10 o'clock tomorrow.

WEDNESDAY, MARCH 19, 1986.

Mr. BOLAND. The Committee will come to order.

Why don't you go ahead with your statement.

OPENING STATEMENT

Mr. THOMAS. I thought what I would do, Mr. Chairman, is not read the statement since you have it. Instead, I would like to summarize and highlight the points that are made in the statement for you.

I very much appreciate your understanding my absence yesterday. The conflict I had, the Superfund Conference Committee, as you know, was meeting and I have been trying to participate with them in their process. It went on for quite a while yesterday afternoon.

The budget which we have submitted for fiscal year 1987, I believe, represents a good balance between protection of human health and the environment and the need to balance the budget.

I feel the clear direction that Congress and the Administration have taken towards deficit reduction while at the same time recognizing the priority that has to be given to the environment is reflected in that budget.

This budget provides a good stable base for 1987. It is important to maintain the momentum we established for all our programs during the past several years. It represents almost four-and-a-quarter billion dollars and over 13,000 FTEs broken down into three major components: about $1.4 billion for the operating budget, a little over a billion dollars for Superfund and $1.8 billion for the construction grants, which begins the phase-down we proposed last year on the construction grant program.

That overall is about a $140 million increase in operating programs if you exclude construction grants and our Superfund accounts and a 200 FTE decrease.

So we feel we have a stable base and the ability to maintain momentum. Within this budget we have clearly reflected priorities. If you look at those priorities, you will see that the momentum and priority for hazardous waste that were established several years ago continue.

The RCRA program reflects an increase over 1986 both in people and dollars. It, also, is reflected as a continuing priority in our research program.

Superfund is a difficult issue. The FY 1987 budget reflects a number which is consistent with the Administration's proposal of last year—continued increase and steady growth in the Superfund program. But as you know we are in a very difficult situation with Superfund right now for 1986 in that we are still awaiting the conference committee's and Congress' final action on reauthorization.

I think the ultimate number for 1987 is a good number, but obviously it is one we will have to re-visit once we conclude the process of reauthorization.

On the air side, the budget reflects priorities that we have established for continuing our effort on the basic national air quality standards such as ozone, the review of the sulfur dioxide standard, major new standards begun last year on the air toxics and emergency preparedness.

In water, the resources there are to continue our municipal policy to try to assure compliance with the July 1988 deadline and a strong enforcement effort in that regard.

Groundwater initiatives that were begun several years ago under the agency's groundwater initiative are reflected both in RCRA and Superfund resources. The water program also reflects that priority.

For the Great Lakes and Chesapeake Bay, and our basin or estuary initiative, reflect the priorities we have given those programs, overall a strong enforcement program.

Within research and development I have already mentioned hazardous waste. Acid rain also continues as a strong initiative for research within the agency. Finally the State portion of this budget reflects the same kind of commitment that we have in the Federal portion of the budget. That is a strong, stable base and with continued momentum.

You will see basically the same overall amount of money for the States, a slight decrease, just as we have a slight decrease in our operating budget but with a mix between them.

There are increases in State grants for hazardous waste, and underground storage tanks. State grants for air toxics remain the same and those for water decrease.

So, in conclusion we feel, the 1987 budget is a strong stable budget, maintaining momentum and reflecting the priorities that we feel are important, priorities that have been established over the last several years, for the agency.

The Budget also reflects the effect of Gramm-Rudman-Hollings in 1986 where we took the 4.3 reduction in the agency. It also reflects the $144 billion target set by Gramm-Rudman-Hollings for 1987.

So in conclusion, Mr. Chairman, I feel that we have a budget that is a defensible budget for the agency.

As a final note, Mr. Chairman, I would just like to tell you that we very much appreciate your leadership last year on two difficult issues as our budget went through Congress. One was the ocean incineration issue and the position that was taken concerning environmental impact statements, and the other was the short-term funding for Superfund.

We appreciate the opportunity to communicate with you and the stance you took as this budget proceeded through Congress.

I just wanted to note that in conclusion.

[The statement of Mr. Thomas and biographical sketches follow:]

STATEMENT OF LEE M. THOMAS
ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
HOUSE APPPOPRIATIONS COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 19, 1986

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE: I APPRECIATE THIS OPPORTUNITY TODAY TO REVIEW WITH YOU THE CURRENT STATUS OF PROGRAMS AT THE ENVIRONMENTAL PROTECTION AGENCY AND TO DISCUSS WITH YOU THE PRESIDENT'S 1987 BUDGET REQUEST. WITH ME TODAY ARE THE DEPUTY ADMINISTRATOR, A. JAMES BARNES, AND THE ASSISTANT ADMINISTRATORS WHO MANAGE OUR PROGRAMS.

WE BELIEVE THE PRESIDENT'S FY 1987 BUDGET STRIKES A BALANCE BETWEEN THE AGENCY'S MISSION TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT, AND THE NATION'S NEED TO MOVE TOWARD A BALANCED BUDGET. OUR 1987 REQUEST PROVIDES A STABLE AND SOUND RESOURCE BASE THAT WILL ENABLE THE AGENCY TO MAINTAIN THE MOMENTUM IT HAS DEVELOPED IN THE PAST FEW YEARS.

OVERVIEW

OUR PROPOSED 1987 BUDGET WILL BRING ABOUT SUBSTANTIAL ENVIRONMENTAL PROGRESS OVER THE NEXT SEVERAL YEARS. THE PRESIDENT IS REQUESTING $4.23 BILLION SUPPORTED BY 13,161 WORKYEARS. THE REQUEST INCLUDES $1.38 BILLION AND 11,445 WORKYEARS FOR OUR OPERATING PROGRAMS. WE ARE ALSO REQUESTING 1,716 WORKYEARS AND $1.05 BILLION FOR THE SUPERFUND PROGRAM.

In addition, the President will submit an amended 1987 request for the Construction Grants program of $1.8 billion once appropriate reform legislation is enacted.

Excluding Construction Grants, our 1987 request is an increase of $139 million, and a decrease of 200 workyears from the 1986 current estimate. The request amounts to an increase of 6 percent in dollars and a decrease of 2 percent in personnel.

The stabilized resource level proposed in our budget reflects the continued high priority the President places on the programs administered by EPA. This request is all the more significant when viewed in the context of the Administration's need to meet the requirements of the Balanced Budget and Emergency Deficit Control Act.

We support the Administration's and Congress' effort to reduce the deficit. Before discussing the details of the President's FY 1987 Budget Request, I would like to briefly discuss our assessment of the effect of proposed sequestration of fiscal year 1986 funds on the Agency's programs as a result of the Balanced Budget Act. Like other domestic agencies that have not been exempted, all of our appropriations subject to the provisions of the Act have been reduced by 4.3 percent. These reductions

WILL BE SPREAD EQUALLY AMONG ALL PROGRAMS, PROJECTS AND ACTIVITIES WITHIN THE AGENCY'S BUDGET, AS REQUIRED BY THE LEGISLATION.

WHILE IT IS HUMAN NATURE NOT TO WELCOME ANY REDUCTIONS IN WHAT WE BELIEVE ARE PROGRAMS OF HIGH PRIORITY TO THE AMERICAN PEOPLE, WE CERTAINLY CAN LIVE WITHIN THE BOUNDS OF THE REMAINING 95.7 PERCENT. I SAY THAT WITH CONFIDENCE, BASED ON A VERY CAREFUL REVIEW AND ANALYSIS THAT WE UNDERTOOK AND ARE STILL CONDUCTING AT EPA. WE WILL BE ABLE TO "TIGHTEN THE BELT" AND CONTINUE TO OPERATE VIABLE ENVIRONMENTAL PROGRAMS WITHIN THE FY 1986 CONSTRAINTS OF THE LEGISLATION.

I WOULD NOW LIKE TO FOCUS ON THE PRESIDENT'S PROPOSED 1987 BUDGET FOR EPA. FIRST, LET ME BEGIN BY SAYING THAT THIS BUDGET WILL PROVIDE SUFFICIENT RESOURCE LEVELS NEEDED FOR US TO MEET OUR LEGISLATIVE DEADLINES. IF WE ENCOUNTER ANY PROBLEMS MEETING THESE DEADLINES, IT IS BECAUSE OF THE COMPLEX AND TECHNICAL NATURE OF THE ISSUES INVOLVED, NOT THE LEVEL OF RESOURCES AVAILABLE. IN ADDITION, OUR REQUEST FOR SUPERFUND IS PREDICATED ON THE CURRENT ADMINISTRATION-SUPPORTED REAUTHORIZATION PROPOSAL AND WE MAY HAVE TO REVIEW OUR RESOURCE REQUEST ONCE THE REAUTHORIZATION PROCESS HAS BEEN COMPLETED. I WOULD LIKE TO NOW HIGHLIGHT SEVERAL OF THE KEY PROGRAMMATIC ISSUES CENTRAL TO THE PRESIDENT'S FY 1987 REQUEST.

THE CONTROL OF HAZARDOUS WASTE

UNCONTROLLED HAZARDOUS WASTES ARE ONE OF THE NATION'S MOST PRESSING ENVIRONMENTAL PROBLEMS. THE SUPERFUND PROGRAM WAS ESTABLISHED OVER FIVE YEARS AGO TO ADDRESS THESE PROBLEMS. SINCE THAT TIME, THE AGENCY HAS BEGUN WORK AT HUNDREDS OF HAZARDOUS WASTE SITES BY ADDRESSING BOTH IMMEDIATE THREATS TO HUMAN HEALTH AND INITIATING LONG-TERM CLEAN-UP ACTIONS.

THE 1987 REQUEST FOR SUPERFUND PROVIDES FOR A PROGRAM THAT WOULD CONTINUE AT THE LEVEL WE DEVELOPED IN OUR REAUTHORIZATION PROPOSAL TO CONGRESS. HOWEVER, THE TAXING AUTHORITY THAT SUPPORTS THE SUPERFUND PROGRAM EXPIRED LAST SEPTEMBER 30. UNTIL REAUTHORIZATION IS ACCOMPLISHED, THERE ARE INSUFFICIENT REVENUES TO SUPPORT A SUPERFUND PROGRAM IN 1987.

ALTHOUGH WE ARE TEMPORARILY SLOWED IN SUPERFUND, WE ARE PUSHING FORWARD RAPIDLY IN OUR IMPLEMENTATION OF THE HAZARDOUS WASTE REGULATORY PROGRAM UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT. TO SUPPORT OUR EFFORTS TO IMPLEMENT EXISTING, AS WELL AS NEW, PROGRAM RESPONSIBILITIES REQUIRED UNDER THE RCRA AMENDMENTS, THE 1987 REQUEST OF 1,462 WORKYEARS AND $256 MILLION REPRESENTS A 20 WORKYEAR AND $18 MILLION INCREASE ABOVE THE 1986 BUDGET. MAJOR PRIORITIES IN THE

1987 HAZARDOUS WASTE BUDGET INCLUDE IMPLEMENTING A CORRECTIVE ACTION PROGRAM, RESTRICTING WASTES FROM LAND DISPOSAL, AND REGULATING UNDERGROUND STORAGE TANKS. WE ARE ALSO IMPLEMENTING THE NEW CORRECTIVE ACTION REQUIREMENTS CONCERNING THE HANDLING OF HAZARDOUS WASTES AT WASTEWATER TREATMENT PLANTS AND ANALYZING POSSIBLE FUTURE RESTRICTIONS ON THE UNDERGROUND INJECTION OF HAZARDOUS WASTE.

RESEARCH TO SUPPORT AGENCY PRIORITIES

OUR 1987 BUDGET PROVIDES THE AGENCY'S RESEARCH AND DEVELOPMENT PROGRAM WITH $295 MILLION. ALTHOUGH THIS REPRESENTS A REDUCTION OF 6 PERCENT BELOW 1986, THE REQUEST REFLECTS A CONSCIENTIOUS ATTEMPT TO FOCUS THE AGENCY'S RESEARCH PROGRAM ON AREAS THAT WILL YIELD THE GREATEST BENEFIT TO HIGH PRIORITY REGULATORY PROGRAMS.

OUR 1987 RESEARCH BUDGET WILL CONTINUE TO STRENGTHEN THE AGENCY'S CAPACITY TO MEASURE, ASSESS, AND CONTROL THE HEALTH AND ENVIRONMENTAL RISKS POSED BY SUCH CROSS-MEDIA PROBLEMS AS ACID RAIN, HAZARDOUS WASTES, AND TOXIC AIR POLLUTANTS.

FOR EXAMPLE, THE 1987 ACID RAIN RESEARCH PROGRAM WILL BE EXPANDED TO PROVIDE ACCURATE AND RELIABLE SCIENTIFIC INFORMATION ON WHICH WE CAN BASE SOUND REGULATORY DECISIONS.

OUR TOP PRIORITIES FOR ACID RAIN RESEARCH IN 1987 ARE:

- TO CAREFULLY ASSESS THE RELATIVE CONTRIBUTIONS OF VARIOUS SOURCES OF ACID DEPOSITION;
- TO DEEPEN OUR UNDERSTANDING OF THE DAMAGE DONE TO MATERIALS BY ACID RAIN;

THE TOTAL FEDERAL COMMITMENT TO ACID RAIN RESEARCH WILL BE $85 MILLION. THE AGENCY'S PORTION OF THE ACID RAIN PROGRAM WILL INCREASE BY 13 PERCENT TO $55.1 MILLION.

MAINTAINING THE AGENCY'S ENFORCEMENT EFFORT

OUR 1987 BUDGET WILL PROVIDE THE AGENCY WITH RESOURCES NECESSARY TO CONTINUE TO SUCCESSFULLY IMPLEMENT ITS ENFORCEMENT ACTIVITIES. TWO IMPORTANT AREAS RECEIVED INCREASES: HAZARDOUS WASTE, AND ENFORCEMENT AND COMPLIANCE MONITORING. THE PRESIDENT'S REQUEST INCREASES FUNDING FOR HAZARDOUS WASTE ENFORCEMENT ACTIVITIES BY 11 PERCENT. THIS INCREASE WILL SUPPORT OUR EFFORTS TO AGGRESSIVELY ADDRESS CONTAMINATION AT HAZARDOUS WASTE FACILITIES BY IDENTIFYING AND INVESTIGATING RELEASES, AND REQUIRING CORRECTIVE ACTION. ADDITIONAL ENFORCEMENT RESOURCES ARE ALSO REQUESTED FOR ENFORCEMENT AND COMPLIANCE MONITORING TO MAINTAIN OUR EFFORT TO REDUCE CIVIL CASE BACKLOGS AND TO ENHANCE THE CRIMINAL ENFORCEMENT PROGRAM.

THE 1987 REQUEST ALSO CONTINUES TO FULLY SUPPORT TWO MAJOR WATER ENFORCEMENT PROGRAMS, PRETREATMENT AND THE NATIONAL MUNICIPAL POLICY. THE BASIC PURPOSE OF THE PRETREATMENT PROGRAM IS TO CONTROL THE DISCHARGE OF TOXICS INTO PUBLICLY OWNED WASTE WATER TREATMENT FACILITIES. THE NATIONAL MUNICIPAL POLICY SEEKS TO ENSURE THAT ALL SUCH FACILITIES COMPLY WITH TREATMENT REQUIREMENTS BY THE DEADLINES SET IN THE CLEAN WATER ACT.

THESE FOCUSED ENFORCEMENT INCREASES REFLECT THE IMPORTANCE WITH WHICH WE VIEW THESE AREAS OF OUR RESPONSIBILITY. ALONG WITH ACTUAL ENVIRONMENTAL RESULTS, ATTAINMENT OF HIGH LEVELS OF COMPLIANCE WITH ENVIRONMENTAL STANDARDS IS THE AGENCY'S MOST TANGIBLE MEASURE OF SUCCESS. FAILURE TO AGGRESSIVELY ENFORCE THE LAW, LEADING TO LOW LEVELS OF COMPLIANCE, WOULD REDUCE THE OVERALL BENEFITS FROM OUR POLLUTION CONTROL INVESTMENTS.

MAINTAINING GRANT ASSISTANCE PROGRAMS

AN EFFECTIVE PARTNERSHIP BETWEEN EPA AND THE STATES IS ONE KEY TO SUCCESSFUL ENVIRONMENTAL MANAGEMENT. THE INCREASING NUMBER OF EPA PROGRAMS DELEGATED TO THE STATES UNDERSCORES THE NEED TO IMPLEMENT A CONSISTENT POLICY ON EPA/STATE RELATIONS. EPA'S 1987 BUDGET ALLOCATES A TOTAL OF $270 MILLION FOR GRANT ASSISTANCE PROGRAMS. WHILE THE

TOTAL GRANT LEVELS ARE REDUCED, WE BELIEVE THAT PROGRAM IMPACTS CAN BE KEPT TO A MINIMUM. WE INTEND TO WORK WITH THE STATES IN HELPING TO DEVELOP REASONABLE SYSTEMS THAT WILL INCREASE REVENUES TO OFFSET OUR PROPOSED REDUCTION. FOR EXAMPLE, I AM CONVENING A TASK FORCE TO EXAMINE NEW MEANS TO COLLECT USER FEES; THE STATES SHOULD BE ABLE TO TAKE ADVANTAGE OF EPA'S INNOVATIONS IN THIS AREA. HAZARDOUS WASTE GRANTS FOR RCRA IMPLEMENTATION AND UNDERGROUND STORAGE TANKS INCREASE BY $11 MILLION PRIMARILY TO SUPPORT REQUIREMENTS OF THE 1984 RCRA AMENDMENTS. THESE INCREASES WILL SUPPORT ADDITIONAL STATE EFFORTS TO ENFORCE COMPLIANCE AT HAZARDOUS WASTE FACILITIES, AND TO SUPPORT STATE UNDERGROUND STORAGE TANK ENFORCEMENT ACTIVITIES.

EPA ANTICIPATES THAT IT WILL SUBMIT LEGISLATION TO CONSOLIDATE ALL CATEGORICAL GRANTS CURRENTLY UNDER SEVEN ENVIRONMENTAL CONTROL PROGRAMS INTO A POLLUTION CONTROL BLOCK GRANT. WE ARE WORKING CLOSELY WITH OUR STATE PARTNERS TO REVIEW AND ASSESS THIS CONCEPT. THIS CONSOLIDATION SHOULD ENHANCE THE ABILITY OF STATE POLICYMAKERS TO ADMINISTER THESE PROGRAMS IN AN EFFICIENT MANNER AND INCREASE STATE FLEXIBILITY. DUE TO THE RAPID INCREASE IN REQUIREMENTS IMPOSED BY THE 1984 HAZARDOUS WASTE AMENDMENTS, THE HAZARDOUS WASTE PROGRAM WILL RETAIN ITS CATEGORICAL FUNDING UNTIL 1988.

THE PRESIDENT'S 1987 BUDGET CONTINUES TO MAINTAIN OUR COMMITMENT TO THE CHESAPEAKE BAY AND GREAT LAKES PROGRAMS. WE PROPOSE TO CONTINUE FEDERAL SUPPORT IN THIS, THE THIRD YEAR OF THE CLEANUP PROGRAM FOR THE CHESAPEAKE BAY AT THE $10 MILLION LEVEL. THIS $10 MILLION OF EPA SUPPORT IS DESIGNED TO HELP THE BAY STATES PRIMARILY THROUGH COST-SHARING GRANTS, WHILE CONTINUING EPA'S ROLE IN MONITORING AND MODELING. WE ALSO PROPOSE $5.7 MILLION FOR THE GREAT LAKES PROGRAM. IN ADDITION, OUR BUDGET REQUEST MAINTAINS SUPPORT FOR THE ESTUARINE PROGRAM FOR WATER QUALITY MANAGEMENT IN FOUR IMPORTANT COASTAL WATER BODIES. IN 1987, TWO ADDITIONAL NEW ESTUARINE INITIATIVES WILL BE SELECTED ON THE BASIS OF NATIONAL ENVIRONMENTAL PRIORITIES.

FOR OUR LARGEST GRANT PROGRAM, CONSTRUCTION GRANTS, THE PRESIDENT WILL SUBMIT AN AMENDED REQUEST FOR $1.8 BILLION AFTER APPROPRIATE REFORM LEGISLATION IS ENACTED. THE AGENCY CONTINUES TO SUPPORT THE ADMINISTRATION'S REAUTHORIZATION PROPOSAL TO PHASE OUT FUNDING FOR THE PROGRAM BY 1990 AND LIMIT FUNDING TO EXISTING PROJECTS THAT HAVE PREVIOUSLY RECEIVED FEDERAL FUNDS, THAT IS, TO FOREGO FUNDING FOR ADDITIONAL NEW STARTS.

CONTROLLING EMISSIONS OF HAZARDOUS AIR POLLUTANTS

IN 1987 EPA WILL CONTINUE TO PLACE THE HIGHEST PRIORITY IN IMPLEMENTING A COMPREHENSIVE NATIONAL AIR TOXICS STRATEGY. CONSISTENT WITH THE NATIONAL STRATEGY AND GUIDANCE, STATE AND LOCAL PROGRAMS WILL BE ELIGIBLE FOR ASSISTANCE TO ENHANCE CAPABILITIES TO ADDRESS MULTI-SOURCE POLLUTANTS IN SPECIFIC GEOGRAPHIC AREAS.

CONCLUSION

THESE ARE SOME OF THE HIGHLIGHTS FROM OUR 1987 BUDGET REQUEST. I AM VERY PLEASED BY THE OUTCOME OF THIS FIRST STAGE OF THE BUDGET PROCESS. WE AT EPA SHOULD FEEL GOOD ABOUT THE ADMINISTRATION'S COMMITMENT TO OUR MISSION, EVEN IN TIMES OF GOVERNMENT-WIDE BUDGET REDUCTIONS. I BELIEVE THIS IS A STRONG BUDGET, -- ONE THAT WILL PROVIDE EPA WITH THE RESOURCES WE NEED TO CONTINUE PROTECTING HUMAN HEALTH AND THE ENVIRONMENT.

RICHARD H. MAYS
Senior Enforcement Counsel
U.S. Environmental Protection Agency

Born in El Dorado, Arkansas, 1937.

Education: B.A., University of Oklahoma, 1959

LLB., University of Arkansas, 1961

Private practice of law in El Dorado and Little Rock, Arkansas, 1961-1980;

Department Attorney, Arkansas Department of Pollution Control & Ecology, State of Arkansas, 1980-1981;

Attorney, U.S. Environmental Protection Agency, Washington, D.C. 1981-present;

Served in EPA's Hazardous Waste Enforcement Task Force, January - June, 1981; Hazardous Waste Division, June, 1981 - June, 1982; Special Assistant to Enforcement Counsel/Deputy General Counsel, June, 1982 - March, 1983.

Serves as Senior Enforcement Counsel in Office of Enforcement at EPA since March, 1983. Responsibilities include oversight of the Agency's judicial enforcement program and development of national enforcement policies.

Has been designated Acting Assistant Administrator for Enforcement and Compliance Monitoring as of March 1, 1986. Responsibilities include being principal advisor to Administrator in establishing and carrying out Agency-wide enforcement policies and programs; chief enforcement officer for Agency in matters pertaining to judicial enforcement and conduct of enforcement activities on an Agency-wide basis to ensure national consistency and conformity with environmental laws and regulations.

FRANCIS S. BLAKE
GENERAL COUNSEL

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5309 Locust Avenue
Bethesda, MD 20814
(301) 530-6552

Office Address:
401 M Street, SW
Washington, DC 20460
(202) 475-8040

Educational Background

B.A., 1971, Harvard College. Graduated magna cum laude, major in Government.

J.D., 1976, Columbia Law School. Editor-in-Chief, Columbia Law Review. Kent Scholar 1973-74; 1975-76; Stone Scholar, 1974-75.

Employment Background

1985 - present	General Counsel for U.S. Environmental Protection Agency. Serves as the primary legal adviser to the Administrator.
1983 - 1985	Partner, Swidler, Berlin & Strelow, Chtd. Specialized in litigation, utility and environmental law.
1981 - 1983	Deputy Counsel to Vice President Bush; Deputy Counsel to the Presidential Task Force on Regulatory Relief. Duties included work on a wide range of regulatory issues as well as other legal issues for the Office of Vice President.
1978 - 1981	Associate, Leva, Hawes, Symington, Martin & Oppenheimer. Worked primarily on litigation, environmental, utility, and administrative law.
1977 - 1978	Law Clerk to Justice John Paul Stevens, U.S. Supreme Court.
1976 - 1977	Law Clerk to Justice Wilfred Feinberg, U.S. Court of Appeals for the Second Circuit.
1971 - 1973	Legislative Aide, Joint Committee on Social Welfare, Massachusetts State Legislature.

Marital Status	Married (two children)
Born	July 30, 1949 Boston, MA

JENNIFER JOY MANSON
Assistant Administrator
U.S. Environmental Protection Agency
Office of External Affairs
October, 1985

Jennifer Joy Manson was sworn in as Assistant Administrator of EPA's Office of External Affairs on October 17, 1985. The Office of External Affairs manages EPA's Congressional relations, prepares legislation and testimony before Congress, and handles public affairs and relations with environmental organizations, state and local governments, private sector institutions and other federal agencies. Miss Manson worked at EPA as a consultant for three months prior to her appointment.

Prior to coming to EPA, Miss Manson worked for a decade in policy making and management operations at the White House, for the Governor of Virginia, in the U.S. Senate and in several political campaigns.

From 1982 to 1985, Manson worked for U.S. Senator John W. Warner (R-VA), as his Legislative Director, his statewide campaign manager for the 1984 election, and his Executive Assistant.

Prior to joining the Senator's staff, Manson served as Virginia Governor John N. Dalton's staff policy liaison for four years, and was the youngest person, and first woman, to be appointed Executive Assistant to the Governor in Virginia. Miss Manson was later promoted to Senior Executive Assistant, serving as chief of staff for the Governor's office until Governor Dalton's term of office was completed in January 1982.

From August 1976 to February 1977, she served in the White House office of communications, which was responsible for Presidential policy briefings and media relations. From September 1975 until August 1976, she worked in research and convention activities at the national campaign headquarters for President Ford.

Miss Manson has lived abroad for more than five years and currently resides in Alexandria, Virginia. She received a bachelor's degree in speech (communications) from the University of North Carolina in 1974.

# # #

BIOGRAPHICAL SKETCH
FOR
LAWRENCE J. JENSEN

Mr. Jensen, 35, was nominated by President Reagan to be the Assistant Administrator for Water at the Environmental Protection Agency on September 9, 1985. He was confirmed by the Senate on October 16, 1985.

At the time of his nomination, he was serving as Associate Solicitor for Energy and Resources in the Department of Interior. In that capacity, he acted as the principal legal counsel in Interior on issues involving reclamation and water law and the management and use of the public lands, including mineral leasing, royalty management, land acquisitions and exchanges, international boundary disputes, grazing and timber. During his four years at Interior, he also served for eighteen months as Associate Solicitor for Indian Affairs.

Prior to coming to Washington in 1981, Mr. Jensen practiced law in Salt Lake City with the law firm of Jones, Waldo, Holbrook, and McDonough, specializing in litigation. He began his career in 1976 as a trial attorney for the Department of Justice in Washington, D.C.

Mr. Jensen was educated in the public schools in Utah. He did his undergraduate work at Yale University and the University of Utah, from which he graduated in 1973 with a B.A. in History. He received his law degree from Brigham Young University in 1976.

Mr. Jensen is married to the former Terri Fisher of Provo, Utah, and resides with her and their three daughters in Woodbridge, Virginia. Mr. Jensen is a member of the Church of Jesus Christ of Latter Day Saints.

Current as of 10/8/85

BIOGRAPHICAL SKETCH

DR. J. WINSTON PORTER

Dr. J. Winston Porter is Assistant Administrator for Solid Waste and Emergency Response for the US Environmental Protection Agency. As such, he directs the Superfund and RCRA hazardous waste management programs.

From 1976 until May 1985, Dr. Porter was the principal in the management and engineering consulting firm of J.W. Porter & Associates, Leesburg, Virginia. His practice included energy and environmental analyses, market surveys, and management of environmental/permitting programs for industrial projects.

Prior to forming J. W. Porter & Associates in 1976, he was associated for 10 years with the Bechtel engineering-construction organization. Dr. Porter served as a Vice President of two Bechtel subsidiaries in Saudi Arabia. He also served as Program Manager for the Master Plan of the multi-billion dollar Jubail Industrial City. In this position, he directed teams in Riyadh, Beirut, and San Francisco in preparing a detailed plan for the Jubail infrastructure, including power, water, waste disposal, transportation, communications, manpower training, and community facilities.

In 1972, Dr. Porter was named the first Manager of Bechtel's Environmental Services Department. He developed and directed a staff of approximately 70 professionals engaged in pollution control technology, pilot plant studies, municipal wastewater treatment, and project environmental impact analyses.

Prior to joining Bechtel in 1966, Dr. Porter was Chairman of the Chemistry Department of the College of Petroleum and Minerals in Dhahran, Saudi Arabia.

Dr. Porter received his B.S. degree in chemical engineering from the University of Texas (Austin) in 1960 and his Ph.D. degree in chemical engineering from the University of California (Berkeley) in 1965. He is a registered Professional Engineer in California, Texas and Virginia. Dr. Porter is a Member of the American Institute of Chemical Engineers, American Chemical Society, the Water Pollution Control Federation, and is listed in American Men and Women of Science.

BIOGRAPHY
J. Craig Potter

James Craig Potter was born in La Jolla, California, 12/23/43. He now lives in Alexandria, Virginia, with his wife, Louise, and his son, Spencer.

EMPLOYMENT HISTORY

February 1986 to Present:
Assistant Administrator for Air and Radiation, Environmental Protection Agency. Responsible for setting and enforcing standards for national ambient air quality, hazardous air pollutants, new source performance standards, and standards for prevention of significant deterioration of air quality. Responsible for establishing and enforcing emission standards for mobile sources (vehicles and aircraft), and establishing radiation standards.

October 1985 to February 1986
Consultant - on detail to the Environmental Protection Agency.

July 1985 to October 1985
Acting Executive Secretary, National Fish and Wildlife Foundation, Department of the Interior.
Responsible for day-to-day operation of the Foundation and its 9-member Board of Directors. The Foundation was created by the President and chartered by Congress to solicit and accept tax-deductible donations of land, other property, and financial gifts from corporate America and the general public in order to further the activities of the U.S. Fish and Wildlife Service.

January 1985 to July 1985
Acting Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior.
Responsible for full range of duties associated with the development, conservation and utilization of fish, wildlife, recreational, cultural, historic, and park-system resources of the Nation. Intimately involved in management, policy formulation, program appraisal, evaluation and supervision of the National Park Service and the Fish and Wildlife Service. Maintained contact and coordinated activities with dozens of groups, including State goernments, regional commissions, Members and Committees of Congress, foreign goernments, and other Federal agencies that were involved with natural resource programs. Immediately responsible

for legislative activities and directly involved in coordination and presentation of Congressional tetimony. Also responsible for budget development. Instrumental in building a widely respected air program within the National Park Service. Principal author and primary spokesman for the lake liming program during the development of the 1985 budget proposal. Represented the Department in the coordination with other agencies of marine environmental quality and biological resource programs. Enjoyed wide latitude in developing, directing and managing the full gamut of Secretarial activities.

July 1982 to January 1985
Principal Deputy Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior.
In addition to being the alter ego of the Assistant Secretary, performed duties described above under Acting Assistant Secretary.

March 1981 to July 1982
Special Assistant to the Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior
As Special Assistant, performed duties substantially similar to those performed as Deputy and as Acting Assistant Secretary. Although I did function as the Acting Assistant Secretary in this instance, I did not act as his alter ego on a daily basis. Nor did I actually testify at Congressional hearings or get as much public exposure as does a Deputy Assistant Secretary.

January 1978 to March 1981
Professional Staff, Senate Appropriations Committee, United States Senate, Washington, D. C.
Minority Counsel for Transportation Subcommittee (6/79 to 12/80), and Interior Subcommittee (1/78 to 6/79). Full range of activities associated with jurisdiction of both Subcommittees, inluding review of agency budget submissions and justifications, program oversight and investigative activities, extensivve day-to-day contact with affected agencies, preparation and staffing for Subcommittee budget hearings, drafting of legislation, reports, floor statements, budget materials, reprogramming recommendations and correspondence, and staffing of all phases of Subcommittee work.

June 1977 to January 1978
Professional Staff, Government Affairs Committee,
United States Senate, Washington, D.C.
Minority Counsel for the Civil Service and General Services Subcommittee. Transferred to the Subcommittee following Senate reorganization. Substantively, activities were identical to those performed previously on the Post Office and Civil Service Committee.

January 1976 to June 1977
Chief Counsel, Senate Post Office and Civil Service Committee,
United States Senate, Washington, D.C.
Counsel and advisor to Full Committee staff and members. Involved in all phases of Committee activities, including drafting, reviewing and managing legislation and report-writing; speech-writing and presentation; casework and correspondence; investigative and oversight activities.

1973 to 1976
Lawyer, Cheyenne, Wyoming
Began general practice of law in March 1973, and was so engaged until the spring of 1976. Emphasized administrative practice, small corporate activity, bankruptcy, water law, and domestic relations. Did trial work in municipal, State, and Federal courts.

EDUCATION

A.B., University of Illinois at Urbana - 1967
Major: Political Science (Pre-Law)
Split Minor: History and Mathematics

J.D., University of Wyoming at Laramie - 1972
Special Emphasis: Legislative draftsmanship, water law, and energy resource development

PUBLICATIONS

"Masks and Men in Upper Volta," Finance, August 1977

"Transferability of Reclamation Water Rights," article prepared for the Land and Water Law Review. 1971

"Mandate for Leadership," Heritage Foundation, contributor and editor, 1981.

MEMBERSHIPS AND ACTIVITIES

Wyoming State Bar, 1973 to present.
Admitted to practice before all Wyoming Courts, the Federal District Court for Wyoming, the 10th Circuit Court of Appeals, and the U.S. Supreme Court. Application pending before the District of Columbia Bar.

Traveled and worked in Southeast Asia as a member of an International YMCA Delegation in 1964.

Led U.S. Delegation to RAMSAR International Wetlands Convention in May of 1984 in the Netherlands

Currently Vice Chairman of the Environmental Quality Committee of the American Bar Association.

Treasurer of the Tauxemont Community Association and activly involved in local community affairs

Active member of Christ Episcopal Church, Alexandria, Va.

Mr. **Boland**. Thank you very much.

This Committee, of course, appreciates the leadership you have given to EPA. We have contended ever since EPA's budget came to this subcommittee a few years back that this is one of the most difficult agencies to administer because the impact spreads clearly across the whole spectrum of our society, in every area of the nation.

So the amount of funds necessary to do the job that Congress has placed upon your shoulders is important to you, of course, and it is to this Committee.

I think we can say with a great deal of satisfaction that the manner in which you have conducted this agency in the relatively short time you have been there indicates it is moving ahead. There is certainly less controversy than there has been in the past, and it seems to be operating pretty well now.

With respect to the 1987 request, EPA's operating budget is 3.5 percent below the current post-Gramm-Rudman-Hollings 1986 level, a reduction of about $50 million, but Superfund is increased by $189 million.

So by and large, I think the agency has faired pretty well, hasn't it?

Mr. **Thomas**. It has.

RESEARCH AND DEVELOPMENT BUDGET

Mr. **Boland**. At least compared to some of the other agencies that come before this subcommittee for funding. The biggest reduction is in research and development, which is down by ten percent. Why is R&D always the first thing to go?

Mr. **Thomas**. Mr. Chairman, I don't feel it is the first thing to go, but I do think this reduction reflects the fact that the R&D budget is a sizeable part of the Agency's budget. You are talking about some $300 million out of an operating budget of about $1.4 billion.

That is a sizeable part of the total, about a fourth of it. A significant part of the decline is projects in our extramural account that are concluded. The numbers reflect the conclusion of projects without starting up new projects.

So, for instance, as we move to conclude our LIMB project, the budget reflects the fact that it is concluded and the fact you are not going to start a similar project, which saves a significant amount of money.

So those are the kinds of things that R&D lends itself to that our other programs don't lend themselves to as easily. It is a significant amount of money in our budget.

Mr. **Boland**. What about extramural and intramural R&D? Extramural is reduced by some ten percent, while internal FTE are reduced by about one percent. Why shouldn't there be a proportional cut in those two areas?

Mr. **Thomas**. Actually, that reflects a review that I did during the last year with the R&D staff and others. I felt like the intramural account for R&D needed to be not only sustained but should fare better than the extramural account.

I think the core capability within the agency reflected by the intramural account is our overall science and technical base. It is our ability to have inside the agency strong scientists and strong technicians which enables us to do solid research within the agency.

Intramural research will determine how well we manage our extramural research and it also will determine how strong the scientific and technical input is to our regulatory program.

When you look at the 1987 budget compared to 1985 the intramural account reflects significant growth.

I would like to see that intramural account grow some more. I don't think it is as healthy as it should be, frankly. When I look at the capability I look at the expense of operating the kind of laboratory system we have in R&D and I think it can grow.

I don't think the extramural account needs to grow in the same fashion.

Mr. BOLAND. So that is the reason why the extramural account was reduced by about ten percent rather than the intramural account?

Mr. THOMAS. It was a conscious decision I made. As a matter of fact, it was a major policy issue within the Administration as to the internal resources needed for research and development as opposed to the external resources. Whether contracting out is as effective as your internal capability for conducting research and development.

I feel this Agency needs a strong internal R&D capability in the agency, one stronger than had been the direction we were taking.

CONTROL TECHNOLOGY AND ENGINEERS

Mr. BOLAND. Now, in the total reduction in R&D over 80 percent comes in one particular functional area, control technology and engineering.

In every program area the justification explains that technology projects are either being completed, that they are no longer needed, or they are being done by someone else. That seems to suggest a philosophical decision that the Federal Government's role in environmental control technology should be radically reduced.

What would you say to that?

Mr. THOMAS. That is not the philosophical direction that I have given the program. If that is the impression that comes across from the justification, it does not reflect the direction I think is appropriate.

I think there is an appropriate role for the Federal Government in control technology development, particularly in the areas with which we are involved. I think it is a role that has to be coordinated with industry and the academic community better than we have in the past, but I do think that there are clearly points where technology has been developed.

There have been demonstrations of technology and that is where industry should then pick up to disperse that technology at the rate that they feel is appropriate. But I think clearly there is a partnership that needs to be enhanced in technology development.

Mr. BOLAND. So I take it that your judgment is that there is a need for Federal leadership in new control technologies like air and water toxics or hazardous waste—the Federal leadership role in these areas is significant.

Mr. **Thomas**. I think it is. I think it varies between different programs depending upon the maturity of the control technology industry itself. As an example, in the Superfund reauthorization, one of the things I have suggested and supported is an R&D control technology development program where the Federal Government would take on a much more aggressive leadership role with appropriate funding for control technology development and demonstration with industry.

I think this is a new industry where leadership is needed.

SUPERFUND REAUTHORIZATION

Mr. **Boland**. In dealing with the environmental problems, we often hear about "worst case scenarios." That is an expression that often is conjured up in hearings we have in this agency and others.

Let me say that the current mess over Superfund reauthorization I think has given a new meaning to the term, worst case scenario.

We appropriated some $900 million this year but it can't be spent because the trust fund is almost out of money. Do you have any good news as a result of that yesterday or any good news at all?

Mr. **Thomas**. The news is worse. I possibly should not say it, but I told one of the Senators this morning I have almost passed the point of discouragement to the point of disgust. The process——

Mr. **Boland**. Don't resign, though.

Mr. **Thomas**. Don't worry. I haven't gotten to that point.

The reauthorization of Superfund has been an extremely difficult process. The issues are tough to come to grips with.

Mr. **Boland**. What is the toughest issue in that dilemma?

Mr. **Thomas**. The process itself. We have six different committees on the House side and three or four on the Senate side and they all have created a camel that they are trying to make a race horse of.

The end result is they have spent a lot of time looking for a room big enough to hold everybody. You have got all these people trying to come to grips with really complex issues. Nobody trusts anybody.

So they are writing a bill for instance where everybody checks on everybody else. It is going to be the worst paper process, the worst example of matrix management I have seen in any program I have ever managed in 20 years of Government work.

When they come out of this thing, I think there is a good chance they will end up with a program that just does not work.

Mr. **Boland**. And they will blame you for it.

Mr. **Thomas**. Absolutely. Yesterday was a good example. They are discussing Federal facility clean-up. They don't trust the Department of Defense to properly clean up these sites.

They don't trust the States to take on part of the role. So now they are saying that at every stage you have to share what you are doing with the States, with EPA, everybody has to sign off on it. It ultimately will get to the point where you are going to pick a remedy and then EPA is supposed to pick the remedy and make the Department of Defense implement it, or make the Department of Energy implement it.

As a person who has worked in the bureaucracy for a long time, I can tell you they are setting it up so it is absolutely the worst system of all. Everybody is accountable and nobody is accountable under the way they are setting it up, but they have got a designated whipping boy.

SHORTTERM VERSUS LONGTERM REAUTHORIZATION

Mr. **Boland**. You. I suppose you are trying to resolve these difficulties with so many conflicting interests and opinions on it. Everyone seems to agree that a long term solution in reauthorization would be better than a short-term one. That has been the judgment of this Committee. But after six months, the tax and authorizing committee still haven't reached any agreement. Congress usually needs a crisis situation to force action. Are we getting to that point?

Mr. **Thomas**. We are getting there. I, along with you, have taken the position that short-term reauthorization was no help. We needed a full reauthorization. However, six months later I have had to modify that position and I have had to ask you for some help, even if it is a month, even if it is two months, even if it is $50 million or $150 million because we are absolutely ruining the program.

We have got contractors now who have no work and so the subcontractors are dropping off. We have employees that are dropping off from the program and so I have recently taken the position that anything is better than nothing, but whatever you do, don't take the pressure off for the full reauthorization. Only do enough.

By that I mean in terms of time, if you would consider something short term. If you are not going to consider the year, moving the program back up to full speed, which I suggested a few months ago, then only do something for maybe 30 days or maybe 60 days.

Mr. **Boland**. What you are looking for is really a short-term extension to save the program.

Mr. **Thomas**. That is right.

Mr. **Boland**. What is the biggest hang-up on Superfund? Is it taxes?

Mr. **Thomas**. That is the biggest one. The Finance and Ways and Means Committees have not yet engaged and so you have got a major hang-up there.

Then over on the substantive side, you have got the problems I talked about. You have got everything from what should the cleanup standards be to what should the State role be. Those things can be worked through and you can take votes on them and you can solve them.

Finance and Ways and Means just haven't engaged.

Mr. **Boland**. If the conferees cannot agree in this area for let's say 45 days or 90 days or even one year from now, what would happen?

Mr. **Thomas**. We are at a point where we have laid out exactly what actions we have to begin taking. I had used April 1st as a date by which I would have to take some more dramatic actions like cancelling some of our contracts.

One of the things we are looking at is cancelling contracts because we don't have enough money to run them.

The second thing we are looking at is trying to recoup unliquidated assets from existing projects that we have out in the field. We have about 350 projects ongoing out there. They are going slow, but they are ongoing.

We are trying to recoup some of those unliquidated assets, and trying to cancel some of the larger construction projects so we can pull money back. Those are all options I am looking at.

SUPERFUND SHUTDOWN PROCEDURE

Mr. **Boland**. It looks like April 1st is the choke point particularly on contracts. Can you supply for the record what the dates are at which the final irreversible action will be taken to terminate each of them?

Mr. **Thomas**. We can do that, Mr. Chairman. The only problem we have got is it is pretty well a floating game. The last thing I want to do is terminate a contract because of the problem of restarting the contract. The second thing we have had to look at is a reduction in force, anticipating no money October first.

We had to start our RIF process a couple months ago and the problem with that is in addition to the 1,500 Superfund employees, you have to bump across the whole agency. So if you start that in Superfund, you pretty well have to turn EPA upside down.

Mr. **Boland**. Forget about the request for the record or information on the contracts. I presume that if there was a signal sent to contractors, in order to save money they would probably be laying off people.

Mr. **Thomas**. They have already done that. We sent them a letter two or three weeks ago notifying them that there was a potential of termination. They have worked to slow down their work, to stretch out their work. That is what has happened.

Mr. **Boland**. What would be the minimum amount of money required to prevent actual contract terminations, say, by June 1st?

Mr. **Thomas**. I have used a low figure like $35 to $70 million needed to try to just to keep the program inching along. The problem with that small amount is, while I wouldn't have to terminate contracts I have got the problem of no real money going into the contracts. So the subcontracts are falling off because they don't have any work and they are looking at laying off people.

So I can keep from terminating a contract with a fairly small amount of money. But I would like to have enough money to pump back into the contract so that we can really get some work moving and keep everybody busy.

Mr. **Boland**. Any questions on Superfund, Bill?

Mr. **Green**. I guess the question I have is can we do that and still stay within Gramm-Rudman if we wanted to help?

Mr. **Thomas**. I think so. For instance, in FY 1986 you appropriated $861 million. Well, you appropriated $900 million which we then reduced by 4.3 percent in accordance with Gramm-Rudman-Hollings.

I guess the problem is how you reconcile taking more money out of general revenue.

You have to include some kind of pay back authority from future taxes.

Mr. BOLAND. Jerry, do you have anything on Superfund?

Mr. LEWIS. No.

ACID RAIN—DAVIS/LEWIS REPORT

Mr. BOLAND. Each year we seem to have the same problem with acid rain. We ask for action on controls and the Administration answers with more research but I think this year something has changed.

In January, the United States and Canadian special envoys, Drew Lewis, and Bill Davis, issued their joint report. While acknowledging the importance of additional research, Mr. Lewis reached some very clear conclusions.

First, the acid rain problem is real and it is serious and becoming more so. The cause and effect linkage between U.S. power plants and acid rain is apparent.

And the time has come to start working on solutions and stop researching this problem to death. What does EPA think about these findings?

Mr. THOMAS. First of all, I thought the report was a good report, and I think EPA found that the findings section of the report was consistent with our own views as well as the recommendations section.

Mr. BOLAND. What about the Administration—has it endorsed the report?

Mr. THOMAS. Well, that is the process that is going on actually today, Mr. Chairman. I don't want to prejudge what the President and the Prime Minister are going to decide. That is their discussion and they are supposed to announce it this afternoon.

Mr. BOLAND. Has the White House asked for your judgment or opinion on it?

Mr. THOMAS. Yes. I have been in two lengthy meetings with the President on the issue.

Mr. BOLAND. If the President endorses the report, does that mean we will request the $2.5 billion recommended in Federal funds for demonstrating new technologies?

Mr. THOMAS. I think that is what full endorsement would imply. Obviously, the funding issue is difficult given the deficit reduction issue, but I think the kind of endorsement that you are suggesting would be an endorsement to try to seek that funding.

ACID RAIN—RESEARCH

Mr. BOLAND. Now, the research continues again in 1987, with about $60 million in EPA's budget and about $80 million in total spread over other government agencies. Is any of this research going to give us any different answers than what we have now?

Mr. THOMAS. I think it will. It will give us answers to what underlies those general findings that you talked about. For instance, you would need to make decisions on control or non-control and where you would control.

Mr. BOLAND. Haven't those areas been looked at before or researched before?

Mr. THOMAS. No, not really. The kind of research program that is underway, is very consistent with the Lewis report. One of their major findings was that additional research was necessary and they specified the research from a Canadian and U.S. perspective and it is consistent with the interagency research program we have underway, really looking at both water, forest and atmospheric sciences.

There is a lot of information you would need, from a general finding of damage to any kind of specific finding of what are you going to do about it, where are you going to do it, how much are you going to reduce and what are you going to reduce.

Mr. BOLAND. How much do you have to look at this? We can look at the forests of Central Europe and see the results of acid rain.

It would seem that common sense ought to dictate we start implementing controls now, even though it may take five more years for scientists to identify the specific damage mechanisms. What about this?

Mr. THOMAS. I think even in Europe you will see the same thing, trying to determine what the causes of the forest damage is an ongoing part of their research program. As a matter of fact, we are working jointly with them, with Germany and several other countries on those issues. But what do you control? We already have controls on ozone, we have controls on sulfur dioxide, we have controls on nitrogen oxide.

All of these levels have been coming down over the last several years. We intend to continue to have controls. We are now reviewing whether we should tighten those controls. So we have an action plan that has been working over the last several years on the major pollutants that may be causing damage.

So we need to find out if those are the pollutants that are causing the damage we find? And are additional controls beyond the ones we already have in place necessary? Just in the last several years I think we have identified ozone as more of an issue on forest and crop damage than, say, sulfur dioxide or nitrogen oxide. That is something that largely has come out of research over the last couple of years.

We have got a major ozone strategy in this country that is resulting in control of volatile organics, largely related to ozone development. Now, there is no connection as to whether ozone or sulfur dioxide or nitrogen dioxide is causing any forest damage in the United States.

We don't have that kind of connection established nor does the Europeans. So, one, we are trying to determine what is causing the damage, and two, decide whether we need more controls than we already have in place. If so, where and what pollutants should we control.

This is what the research is really all about.

ACID RAIN—CLEAN COAL TECHNOLOGY

Mr. GREEN. Five billion dollars strikes me as a lot of money to spend to avoid doing something on this problem. Is there really $5 billion of research remaining to be done here?

Mr. THOMAS. The $5 billion is really to begin commercial demonstrations on the clean coal technology. I wouldn't really characterize that as research in the sense of research on the cause and effect of acid rain. I think it is a parallel track.

It looks like sulfur dioxide and nitrogen oxide are a major part of this problem. We don't know how much of the problem would be corrected with additional controls, but we think on a parallel track we should start looking at whether there are technologies that can be used to reduce sulfur dioxide.

That is the clean coal technology recommendation which came out of the Lewis/Davis report. They recommended industry and Government together should start putting that technology in place.

They set criteria like retrofitting major polluting plants, ones with trans-boundary effects, ones that will produce sulfur reduction.

So clean coal technology is an action program on that side, while we try to understand how much control is necessary, if any, beyond what we are already doing and to what pollutants. It is a lot of money, I agree with you.

Mr. GREEN. Particularly I guess we have been funding LIMB at $5 million a year. When I hear a number $5 billion coming out of the air, it does startle me.

I also have not so fond memories of the synfuels program. I do recognize there has been a problem here in developing legislation because of the interest of the States which produce high sulfur coal, and to some degree the research is a reparation to them if we should move along the line and permit low sulfur coal to be used as one means of eliminating the problem.

I guess the $5 billion number just boggles the mind.

Mr. THOMAS. It would be $2.5 billion in Government money. I agree with you that is a major expenditure and I think there are two things you have to look at when you decide how much is needed each year. For instance, last year Congress decided $400 million was needed and you took up this issue of clean coal technology. It was a different kind of approach.

You would not look at the kind of retrofit technology that the Lewis/Davis report talks about. But as you look at it, I think you have to decide if there is really that much work out there, enough to need that kind of money for this problem? Is there really that much that industry can demonstrate to justify that kind of money?

Secondly, within the context of deficit reduction, you have to decide if we can afford this versus something else. Those are the two things I think the Administration would look at as well.

I think we can support the concept of committing significant amounts of money necessary to move forward with this phase while at the same time doing other research.

Mr. GREEN. Have you had a chance to look at the Stafford bill?

Mr. THOMAS. I looked at an outline of it last night.

Mr. GREEN. Are you prepared to comment on it at all?

Mr. THOMAS. It is a very comprehensive and far reaching bill and I am not prepared to comment on the details, although I will have the staff take a look at it.

Mr. GREEN. What about the National Governors' strategy of a two-phase approach, the first stage to mitigate about half the sulfur dioxide and then look to see if that is workable before going on to the second stage?

Mr. THOMAS. It presents two big problems. One is if you decide you want additional controls you should first determine what your total amount of reductions will be. That is not the way the National Governors' Association goes about it.

The reason for that is you want to make the most cost effective decisions. You want to make decisions that relate to low sulfur coal versus scrubbers, versus something else. If you try to do it in two increments, you won't achieve that.

You might move to low sulfur coal on the first increment and then find out on the second increment you have to use a scrubber. So you have done both when you could have done one or the other up front.

The second thing is the time frame they call for doesn't make any sense. You probably need more like 10, 15, or 20 years to find out if what you are doing is really having any impact. Three or four years is not enough time.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. BOLAND. Do you have anything on acid rain, Jerry?

VOLATILITY OF FUEL

Mr. LEWIS. Mr. Chairman, a byproduct of acid rain, if you will, lest we forget there is a great tendency in the constituency to involve air quality problems to want to point our fingers at the major industrial resource and acid rain provides that opportunity, as well.

I can't help but be concerned about Southern California where my district is located, continuing problems with mobile sources that are very real.

I would like to have, at least for the record, some response to what we know about and what we are doing about the fact that continued reduction in the lead content in gasoline with the addition of aerosols, I gather through the combustion process we are now realizing more and more creates benzene as a byproduct, that has negative health effects.

What do we know about it? What are we going to do about it? Do we have some substitutes in terms of what we are going to do with gasoline, for my constituents do worry about Kaiser Steel smoke stacks, but they tend to want you not to fool around with their car.

[The information follows:]

VOLATILITY STUDY ANALYSIS

EPA issued a comprehensive report on gasoline volatility, "Study of Gasoline Volatility and Hydrocarbon Emissions," in November 1985. A public hearing was held on February 4, 1986, followed by a workshop on March 12-13, 1986, in which representatives from the major affected industries (e.g., Motor Vehicle Manufacturers Association, American Petroleum Institute, Oxygenated Fuels Association, General Motors), public interest groups (Natural Resources Defense Council) and the government participated. The public comment period closed on March 27; EPA is summarizing the comments and will make them available to all interested parties.

A number of issues raised in the study remain under investigation. Further work is ongoing on the effects of fuel weathering to determine, for example, what happens to evaporative hydrocarbon emissions as fuel 'ages' in a vehicle's fuel tank. Work is also continuing on the effects of ambient temperatures on diurnal losses, i.e., what is the effect of fuel volatility on evaporative hydrocarbon emissions caused by fluctuations in ambient temperatures in the course of a day? EPA is also working toward developing two additional models that can be used to predict emissions from controlled vehicles as a function of both Reid vapor pressure (RVP) and temperature conditions. One model will address the diurnal emissions mentioned above and the other will deal with losses associated with "hot soak" conditions, i.e., evaporative hydrocarbon emissions associated with a parked vehicle which has been recently operated.

Additional studies are being conducted on the overall cost of in-use gasoline RVP control. The major areas of continuing investigation are: (1) the effect on refining costs of controlling the percent of gasoline evaporated at 160°F; (2) the value of refinery equipment purchased specifically for gasoline volatility control during periods of the year without volatility restrictions; (3) the sensitivity of gasoline refinery costs to the availability of butane and alkylation capacity; (4) the effect on the ethanol industry of no longer permitting the 'splash' blending of ethanol and gasoline.

Mr. THOMAS. It is a very good point and a major issue before the agency. We are looking at the whole issue of volatility of fuel, not only benzene but the other components of gasoline and how that is affected by the lead phase-down. As they pull lead out they either have to do additional refining, increase butane, or increase alcohol. We need to find out the impacts on volatility, what does that mean for the ozone.

We have that underway right now and for the record I think we could provide you with a good analysis of what work is underway.

We have a volatility study. We have been studying gasoline vapors, both benzene as well as other components, and health effects. We have regulatory review efforts underway in the agency now that will produce actions probably by the end of this year that deal with volatility and vapor emissions from gasoline.

Mr. LEWIS. While I have been both supportive of and generally pleased with continuing pressure for progress, I must say I share the Chairman's, as well as Mr. Green's, concern about volume of dollars for research versus results that are meaningful in terms of productive analysis and in terms of decreasing in an ongoing pattern the emissions that are out there affecting people's health.

What we don't know about the real health impact after three decades is astonishing to me, and I am wondering when we can expect in this analysis some pretty hard understanding as to where we are going.

Mr. THOMAS. They are difficult issues to deal with. You are really breaking new ground as far as health research is concerned.

I have been impressed, particularly during the last year-and-a-half, as to the new ground EPA is breaking on health effects. For instance, on the air pollutants you are talking about, lot of the information that is being developed on the effects of sulfur dioxide, nitrogen oxides, and ozone is coming out of EPA's health effects research work.

For instance, our Research Triangle Park facility worked in conjunction with the University of North Carolina Medical School. A lot of the information has come from the research work that Congress funds in our appropriations bill.

Our intramural work is a key to that. I see a lot of the results in the context of regulatory decisions that I have to make.

ACID RAIN—LIMB

Mr. BOLAND. Do you have anything on acid rain, Bill?

Mr. **Boner**. Just one question, Mr. Chairman, and that is about the LIMB program. What is the success of that?

Mr. **Thomas**. We are moving this year to actual commercial demonstration of the LIMB project. We are working jointly with the State of Ohio and Ohio Edison. The money provided in our budget for this year will allow us to move forward with that commercial demonstration.

I think we will be making that decision very shortly.

Mr. **Ehreth**. If I might add just a little clarification, we have two types of demonstrations, sir. One is the wall-fired demonstration that Lee was referring to which is already set for ground breaking ceremony with the actual testing to begin next year.

That is a wall-fired unit. Then we have what is commonly referred to as a T-fired unit, for which we have a request for proposal on the street right now. With those two demonstrations underway, we will have demonstrated LIMB technology for at least 80 percent of the utility boiler systems on the market.

Mr. **Boland**. What particular demonstration do you place the most significance on, the wall-fired and the T-fired?

Mr. **Ehreth**. It is impossible to select between the two because each constitute about 40 percent of the total market.

RESOURCE PRIORITY WITH EPA

Mr. **Boland**. We have a few more questions in this area that I think are important. As we all know, EPA is organized along media lines, and I guess that in a sense reflects the patchwork of committees of Congress that authorize the various programs. And, of course, each of those committees is a strong advocate for their particular area.

But as you know, this committee's job is to look across all of the programs to get the best results we can get for the money that we appropriate and you spend.

So I think perhaps we understand better than others how difficult your task is, how difficult it is to weigh the different risks, to compare problems across program lines and to set resource priorities. I am sure there is a tendency to view each problem and each regulation independently.

How do you make sure that resources are devoted to the most important problems?

Mr. **Thomas**. Mr. Chairman, that really is a fundamental question about the management of EPA and is at the heart of what Bill Ruckelshaus talked about quite a bit, and I have spent a lot of my time on that issue.

It is, one, trying to ensure that we have a strong and consistent risk assessment process in each one of our programs; and, two, that we have a process for cross media analysis in our regulatory development area or in our site specific decision-making.

We are working with new mechanisms such as a risk management council which I chair, which includes major office directors from each of my offices across the agency and a risk assessment coordinating council that Jack Moore will chair, which cuts across the agency. We are also working through changes in our regulatory development process, to ensure that we coordinate across the agency in developing a regulation or a policy to take into account its impact across all media, and that early on we try to determine the most risk reduction so we don't have a lost opportunity cost by spending resources on one substance when we should spend on another that would give us more risk reduction.

It is probably one of the most important issues that I will deal with as the Administrator of EPA and I have still got quite a ways to go.

ANALYSIS OF RISK ASSESSMENT GUIDELINES

Mr. **BOLAND**. As you discuss this area, we are pleased with the fact you are developing risk assessment guidelines. Let me ask you whether or not has EPA gone through a process to apply those guidelines to risk in all the medias to see how they stack up and to identify the anomalies in the regulations?

Mr. **THOMAS**. We are in the process of doing that. I might ask Don Ehreth to comment on the guidelines and Milton Russell, our Assistant Administrator for Policy, Planning and Evaluation to comment on the cross media risk assessment project we are doing now.

Mr. **EHRETH**. First of all, five guidelines are completed and going through the agency clearing process right now. They will be going through a public release phase in the very near future. Those guidelines are for carcinogenicity, mutagenicity exposure assessments, complex mixtures and developmental toxicity.

In developing these guidelines we have already reached agreement within the agency to use these guidelines in our risk assessment process across all media so we have already implemented the principal guidance within each one of those documents.

In the meantime we are still developing systemic and reproductive effects guidelines and we are looking at year-end next year for peer review on that process.

Mr. **THOMAS**. Milton?

Mr. **RUSSELL**. We have two processes underway right now. First is to identify on the basis of risk the high priority items in each of the media offices that will be coming forward to the agency in the next couple of years. At the same time identify those areas which we worked on in the past or we are thinking about working on in the future. On the basis of risk these expenditures may not be justified while under other circumstances they would be justified.

That will be included into a major agency planning process. Mr. Thomas will be meeting on in late April in order to develop our program for 1988.

The second project looks at the longer term. It looks within each of the program areas and across the agency as a whole to define four different sources of risk and determine how each of the program elements, or major program elements, stack up.

Those risks would be cancer effects, in terms of lung cancer, also welfare effects which are the impacts on materials and things of that sort, economic impact and finally ecological impacts.

These efforts will be partially quantified to the extent possible and based on expert judgment where this is not possible. The results of the agency study, which involves every section of the agency, will be available some time around next January or February and will form the basis of our priority selection attempts. Then we can maximize our ability to improve the environment within the resources you appropriate.

INDOOR AIR

Mr. **Boland**. Thank you. Since 1970, this nation has spent tens of billions of dollars on air pollution. The program I would think has been largely effective.

We have cleaner air. Since the disaster in Bhopal, the attention is now shifting to toxics in the ambient air. Could we be missing the mark spending billions on outside air? Isn't evidence mounting that the more serious health risk is indoor air which has I guess all but been ignored except for some push from this Committee?

Mr. **Thomas**. You are correct, Mr. Chairman. There has been some push from this Committee and I think it was an appropriate push for the issue over the last few years.

As you will see in our 1987 budget, we have requested funding for indoor air research. I think the progress that has been made during the last ten years on outdoor air has been significant and I don't think we should detract from the fact that that has had a significant impact.

The indoor air issue is one that I think needs to be better characterized. For instance, we found that a major component of the indoor air issue was radon. We had been dealing with it in the context of indoor air.

We found this was a significant public health risk. We have taken that now and begun to deal with that as a separate issue.

It is one that we are trying to come to grips with among a number of agencies and with the States. As we characterize the indoor air issue, I think we have to determine how we can deal with it.

Is there, for instance, a characteristic of indoor air that could more properly be dealt with, say, under our pesticide authority, under our toxic substances authority, by dealing with use of chemical products.

That is the direction we are trying to take with indoor air. One, determine the extent of the problem and its characteristics and two, how to deal with it through program authorities we or other agencies may have.

Mr. **Boland**. What about the TEAM studies—if the TEAM studies are correct that 70 to 90 percent of many toxic exposures come indoors, does not that raise some fundamental questions about EPA's priorities? Why doesn't the 1987 budget reflect those changes?

Mr. **Thomas**. Why don't I first ask Don Ehreth if he would comment on the TEAM study and then let me comment on the priorities.

Mr. **Ehreth**. The TEAM study focuses on organics and certainly does indicate that the relative exposure of organics is significantly higher indoors than it is out of doors.

Mr. **Boland**. No matter where you are living, whether in New Jersey or the farm district.

Mr. **Ehreth**. Pretty much. That level does fluctuate across the country. It has not identified the actual sources contributing to that higher organics, however.

Another thing, part of the answer to your second question is our research budget does reflect an increased emphasis in air toxics organics, a shift from the billions of dollars invested in National Air Quality standards to the air toxic quality.

Mr. **Thomas**. Within our program you see a shift in priority, but I think a fundamental shift you are speaking of is as we learn more about the indoor air program, you will see a fundamental shift as far as action is concerned. I think you would see a further commitment toward the outdoor ambient air that Congress has directed us to research and you will see a shift as we learn more about indoor to more action, as I indicated on radon.

RISKS OF ASBESTOS

Mr. **Boland**. Let's look at another example; this is relative to asbestos. And then I will switch to general questions from the other members.

EPA has made asbestos a high priority. This Committee has made it a high priority, too. Among other things, we are spending $50 million a year in Federal money on school asbestos abatement.

How would you rank asbestos in buildings against other environmental risks?

Mr. **Thomas**. I would rank it as a major environmental risk for a couple of reasons.

One is it is a human carcinogen, and for many other substances we are dealing with their carcinogenity is not known or probable. This is one that we know about from epidemiological studies. I would have to rank it high for that reason.

Secondly, the fact that it is often pervasive throughout a building. It has been used in many parts of the building from the floor tile to the walls to the ceilings and the problems of controlling it are more difficult than some others that may be in the ambient indoor air where ventilation would be the solution. So, for that reason, I would have to rank it high.

We know a lot about it. We know what to do about it when we find it, so I would have to rank it as a very high environmental issue for us to deal with.

RISKS OF RADON

Mr. **Boland**. You issued guidelines on the removal and the abatement of asbestos in buildings, and there is considerable compliance by local communities with respect to those guidelines.

And I understand now that contractors who are removing asbestos should be aware of what those guidelines are and that local communities are concerned about the type of contractor that they are using to abate asbestos in their—particularly in the schools.

I think that comes about as a result of the fact that EPA got around to establishing technical guidelines with respect to abatement

You mentioned a moment ago radon. What are the risks of radon compared to asbestos?

Mr. **Thomas**. Radon is one of the largest public health risk substances that the agency has looked at.

I don't know if we have done a comparative risk between radon and asbestos. As a matter of fact, I don't think we have, but when you look at the risk to an individual in some of the homes where we have found high levels of radon, the risk for that individual having an increased chance of lung cancer is very high.

Again, with radon we have very good long-term health information on the effects of radiation on the human body.

Mr. **Boland**. This is not an area that we were worrying too much about a couple years back, was it?

Mr. **Thomas**. We didn't know too much about it, I don't think, as far as exposure is concerned.

One of the things we are trying to do in the indoor air program is focus on exposure, trying to get better information on what is the risk of exposure to some of these substances.

Radon is an example of one instance where we had the problem and dealt with it over the years, more from the view of uranium mill tailings in the west and the problems from radon as a result of using mill tailings, either building over them or using them in building material.

But I don't think we knew of the problem found in Pennsylvania, where the naturally occurring uranium ore in the soil had created a problem with radon in the home.

So, as we began to do more testing and exposure and analysis, we began to get a far better feel for the larger scope of the problem. We and other agencies have begun to put far more resources into dealing with that.

Mr. **Boland**. Millions of people are probably at risk, because radon levels in their homes exceed the .02 working level standard.

But even at the threshold level of .02, the risk of radon is 200 times greater than the National Academy's risk estimates for asbestos in buildings.

How do you possibly square those two facts?

Mr. **Thomas**. The facts are there, and one of the primary problems we face in dealing with radon is the technical ability that we have to actually reduce the levels of radon in homes.

We are working hard on that. As a matter of fact, our research and development budget supports actual mitigation work.

We are coming out with a home owner's manual in the next month or so that lays out various alternatives that home owners can use in retrofitting their home, based on 18 homes that we did in Pennsylvania.

We are projecting in the 1987 and 1986 budgets another hundred or so homes in Pennsylvania and New Jersey that we will be working on to modify.

One of the issues with radon is you have various alternatives you can use: ventilation systems or sealing, systems etc. What you are talking about is a gas that comes into the home. So, you need to get the gas out or keep the gas from coming in.

So, we are working on both new building standards related to radon; we are working on mitigation techniques for existing homes; and we are working with the State officials on how they can measure and use these techniques and assist home owners in coming to grips with the radon problem.

RADON RESOURCES

Mr. **Boland**. I take it you allocate specific dollars in this budget to meet that problem.

Mr. **Ehreth**. Yes, sir. We have about $320,000 in the 1987 budget to continue the work, $1.55 million in 1986, plus the $432,000 that we allocated in the two previous years to radon.

The only thing I might add is that recognizing that there is such a high potential for hysteria associated with the risks of radon, we immediately set upon a mitigation program, so we would have some solution to hand to people as soon as they found out whether or not they had a problem.

We chose a very wise approach in dealing with radon, because we knew a lot about the health effects.

Because so many people came to us, we went immediately into the mitigation problem. Now we are going back into the research to determine the extent of the problem.

DIOXIN RESOURCES

Mr. **Green**. To follow on this question as to how we allocate resources, I recall an article in Scientific American a few months ago suggesting that we were spending far too much on dioxin versus other dangers to human beings.

Would you care to comment on that?

Mr. **Thomas**. As far as whether we are spending too much on dioxin or not, I don't have the feeling we are spending to much on dioxin.

One of the things, for instance, we are now doing in the agency is look at control alternatives related to dioxin, but also continuing to review the risk assessment of dioxin.

I do think the potential for the hysteria that Don mentioned at times drives our allocation of resources beyond what science would dictate reasonable, and I think there is the potential in something like dioxin for that to happen.

We now have a substance, dioxin, which we find adheres very tightly to soil. For instance, one of the places that is less risky for dioxin to be is in the soil.

But as far as the public is concerned, when you mention the word "dioxin", they don't want to hear you give a scientific explanation as to why it adheres tightly to soil, and, therefore, presents limited exposure to them when in soil.

They want to hear you say you are going to get it away from them as far as possible. That drives, often times, the reaction of public officials as we develop budgets.

I think there is some of that when we look at dioxin. I think there was some of that in the past when we have dealt with PCBs and other substances.

Mr. **Green**. If I could turn to another area, best demonstrated technology, last year you published a new standard of performance for wool fiberglass insulation.

I noticed you used process modification in the term of the best demonstrated technology, because you noted the modifications can achieve lower emissions than those allowed by the standards you ultimately set.

However, you continued by saying that because process modifications are considered proprietary by individual firms in the fiberglass industry, you were reluctant to go that route.

Do we need some sort of legislation requiring compulsory licensing in this kind of situation?

Mr. THOMAS. I am sorry, Mr. Green. I am not fully familiar this morning with the particular issue that you have raised.

Mr. GREEN. I am less interested in the particular issue of fiberglass than the question of whether, if we are going to run into situations where you can't achieve the best result because of patents or other proprietary limitations, we need some sort of legislation that would enable you to designate that as the standard, and then have some means of requiring licensing.

Mr. THOMAS. Frankly, it has not come to me as an issue, that has caused us concern in the development of regulations. But the example you just mentioned seems to indicate it may be.

Let me see if either Craig or Frank can respond?

Mr. POTTER. I think one thing we might point out is that, in general, we are running up against control technology limitations while we are, at the same time, developing capabilities to find problems that we couldn't even come close to measuring in the past.

As far as the NSPS program, in general, is concerned, it is coming along as Congress envisioned it.

I don't think we have addressed the particular issue about what possible changes might be made. I think we are probably all a little disappointed NSPS hasn't come along in terms of technology, but that is a dilemma we are facing.

Mr. GREEN. Do I infer from what you are saying that at least there does not appear to be a widespread problem of not being able to use the best demonstrated technology because of patents or other proprietary problems?

Mr. POTTER. Not that I am aware of.

INVOLVEMENT IN STRATOSPHERIC ISSUES

Mr. BILL GREEN. One other question.

There seems to be increasing acceptance of the view that because of warming in the atmosphere a rise in sea level is almost inevitable in the decades ahead.

Are you starting to look at that from an environmental point of view, and where is this going?

Mr. THOMAS. We are participating in an interagency effort, because clearly that is an interagency effort.

As a matter of fact, it is an international effort.

NOAA and NASA and our agency probably are the three main agencies that have participated in the stratospheric issues.

We have taken probably more of a lead on the stratospheric ozone issue as it relates to chlorofluorocarbons and the possibility of additional controls or whether or not we need controls; whereas, NOAA, I think, has taken more of a lead on the greenhouse research.

But it is an interagency effort. So, the short answer to your question is, yes, we are participating in those reviews.

Also, we are participating in international forums in those issues, as well.

Mr. GREEN. Following up on the ozone side of it, there was a recent report about the hole in the ozone layer that has been found in the Antarctic. Do you have any comment on what you think is the significance of that?

Mr. THOMAS. That was part of a study that NASA had the lead on but we participated in it. It was an anomaly. It was not consistent with the models that have been used by us or NASA when we found that over time there was a depletion of ozone over the Arctic that had not been predicted.

Now, the program is looking into what has caused that and why. We, by the way, have a strategy which is an interagency strategy and an international strategy for looking at the issue of chlorofluorocarbons and stratospheric ozone.

We had a workshop about a week ago that was the first in a series of workshops we intend to have with other agencies, environmental groups, industry groups, international participation by the Department of State and others in looking at the scientific evidence as we try to do a sound risk assessment associated with stratospheric ozone, chlorofluorocarbons and other pollutants and their impacts on stratospheric ozone.

The process is laid out that over the next couple of years we want to conclude the risk assessment, make risk management decisions and try to do that in context of both domestic decisions and international decisions.

We have been participating in an international forum looking at a protocol for the reduction of chlorofluorocarbons in other countries.

We have also been looking at the issue of whether additional regulation is needed on chlorofluorocarbons in the United States.

We have restricted their use already. We have that process underway. We are now in the stage of looking at the risk, looking at what is causing problems like the one you mentioned, and whether additional controls are necessary.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. BOLAND. Mr. Stokes, do you have some questions on Superfund or these other subjects?

SUPERFUND—CONTRACTS TO MINORITY BUSINESSES

Mr. STOKES. Thank you, Mr. Chairman.

Mr. Thomas, I understand in Fiscal Year 1985 you awarded approximately $200 million in contracts under Superfund awards. A little less than $2 million, I understand, went to minority businesses, yet you have an agency goal of approximately five percent for disadvantaged businesses, is that correct?

Mr. THOMAS. Yes.

Mr. STOKES. Can you tell us why you awarded such a small amount?

Mr. **Thomas**. Let me ask Howard Messner, the Assistant Administrator for Administration and Resources Management, to deal with that issue.

Mr. **Messner**. Congressman Stokes, we had $1.3 million the year before, and we had $1.9 million in Superfund this year.

It isn't as good as we wanted to do, but it is a significant increase over previous years. Overall, in our agency we have increased contracting to 8(a) firms by 50 percent this year. We went from $20 million to $30 million.

So, in that overall context, I think we are making a very good effort. In Superfund we anticipate making a very substantial contract award, hopefully this fiscal year, that will probably amount to almost $20 million to an 8(a) firm.

We haven't done that yet. It is still being negotiated, but it would dramatically change that statistic.

So, I think overall we are doing all right. I hope you agree.

In Superfund subcontracting, as you know, 20 percent of all the subcontractors that we have, over $17 million, went to minority firms. So, in a prime contract area you are right; it is our weakest statistic. It is up 38 percent from last year.

So, we are putting the time into it, but overall I think we are really making progress.

Mr. **Stokes**. But there has not yet been a prime contract. The one you are talking about would be the first.

Mr. **Messner**. No. It is anticipated for late August. I will let you know when that is accomplished.

Mr. **Stokes**. Another problem that they bring to my attention is what is a catch-22 situation. As minority businesses, they are awarded five percent advantage of some kind or five points, I guess, they get.

Then, the contractor, however, if he has already had a contract over $50,000, he gets 50 points. They say that knocks them as minorities out of the advantage of having the five points.

Are you familiar with that problem?

Mr. **Messner**. I generally am. We give preference to people who have done performances based on the surety the government has that if we have a record on a person there is some reason to believe they will continue to perform. So that acts as a benefit.

We have a record for some of the companies in the minority contracting world, but many are first time into the marketplace, so it is more of a risk for the government.

We want to give them an advantage, so we do add points to the contracting process. I think it is a balance, and if you use the tools that the Congress has provided, probably minority firms and other disadvantaged firms do get contracts and are able to enter the marketplace successfully.

Mr. **Stokes**. I would have to agree with you that obviously there is a great deal more movement in this area now than there has been in the past.

I certainly deem that to be encouraging and want to certainly ask you to continue redressing the situation, and I will be pleased to know of any additional things you are doing in this area.

Mr. Chairman, I have a couple other questions, if I can.

Mr. **Boland**. Fine.

CONSTRUCTION GRANTS—CLEVELAND

Mr. **Stokes**. Mr. Thomas, my office has received complaints from city officials in Cleveland who stated they are having great difficulties meeting EPA requirements to make new capital improvements within specific time frames.

These officials state that EPA's schedules have not been revised to reflect the fact that cities are getting fewer Federal dollars to make capital improvements, and simply do not have the resources to finish the work on time.

In your judgment, would you be able to give cities more time to make required improvements without jeopardizing environmental safety?

Mr. **Thomas**. I have a feeling, Congressman, that question relates to the construction grant program.

Mr. **Stokes**. It does.

Mr. **Thomas**. The conflict that Cleveland is finding is similar to other cities. It is the July 1, 1988 date in the Clean Water Act for compliance with certain treatment standards, basically secondary treatment in most places, versus the availability of funding and other ways to meet that date.

Are you familiar with Cleveland, specifically?

Mr. **Jensen**. I am not familiar with the Cleveland project.

Mr. **Thomas**. I think that is what they are referring to. We have virtually no flexibility in the time frame, because the date is established in the law.

Its compliance with treatment standards, that are actually the compliance date, was back in the late 1970's when cities were supposed to be in compliance and it has been slipped periodically.

So, we have an aggressive enforcement program at work, but the way we are doing it is to try to work with every city. We have got hundreds of them, to work out a compliance schedule that they can meet and then try to hold them to it.

The flexibility we have got to go beyond 1988 is just not there. We have to work against that date, and that is what I am sure Cleveland is running up against.

Mr. **Stokes**. Right. That is a problem. I have got another city in my district, the small city of Bedford. I don't know whether anyone here with you is familiar with the Justice Department lawsuit brought against the city of Bedford.

Mr. **Thomas**. Was that under the Clean Water Act, as well?

Mr. **Stokes**. It is the sewage treatment, I believe. Anyone here familiar with that?

Mr. **Jensen**. I have a note here, Congressman. I am not familiar with the specifics. Do you have a specific question?

Mr. **Stokes**. I just wondered what was the current status of that situation. If you don't have it with you, if you would supply that for me for the record, I would appreciate it.

Mr. **Thomas**. We could do that, Congressman, on both Cleveland and Bedford, if you would like us to.

Mr. **Stokes**. I would appreciate that.

[The information follows:]

CLEVELAND AND BEDFORD, OHIO

The Cleveland issue concerns the amount of funds available to the City to fund currently scheduled projects. In accordance with Section 216 of the Clean Water Act, the State of Ohio has sole authority (under the priority ranking system) for determining the specific projects that are eligible to receive construction grant funds. Under this authority the State has established a limitation that no municipality can receive more than 20 percent of the State's annual allotment. This means that with the funds currently available to the State of Ohio, Cleveland can receive no more than $6 million in construction grant funds in FY 1986. Since this amount is less than Cleveland needs to proceed with their currently scheduled project, the City has filed suit in State court challenging the legality of Ohio's 20 percent limitation requirement. The City has requested the court to issue an injunction requiring the State to stop all obligations of construction grant funds pending the outcome of the court case. A preliminary hearing on the injunction is scheduled for early April.

The current situation concerning the City of Bedford is that the City has failed to comply with the requirements of the Clean Water Act (CWA) to meet the final effluent limitations specified in the City's National Pollutant Discharge Elimination System (NPDES) permit. Because of this violation, USEPA issued an Administrative Order on November 29, 1983, pursuant to Section 309 of the CWA. The Order required the City to develop and implement a plan to achieve compliance at the earliest possible time but no later than the statutory date of July 1, 1988. Because agreement between USEPA and the City could not be reached regarding compliance with the Order, the U.S. Attorney filed a suit against Bedford on September 30, 1985. However, the Project Priority List and priority ranking system established by the State of Ohio pursuant to Section 216 of the CWA ranks Bedford well below those facilities now anticipated to receive Federal assistance under the construction grants program. This means that the City will have to construct the needed facilities without construction grant funds.

Mr. STOKES. Thank you, Mr. Chairman.

Mr. BOLAND. Lindy.

WETLANDS EROSIONS

Ms. BOGGS. Mr. Chairman, I have two questions. Lee, it is very nice to see you.

I would like to commend Mr. Titus who has sent us information from EPA's strategic studies staff on the problem of environmental and economic issues facing coastal Louisiana and particularly in regards to what Mr. Green was talking about, to the rising sea level problem.

I know that you have worked cooperatively with the National Academy of Sciences in this regard, and that in Louisiana, itself, you have a program going on with Terreborne Parish and the Louisiana State Survey. The loss of wetlands, and coastal flooding is of tremendous interest to Louisiana. Salt water intrusion that could occur from the rising of the sea level is, of course, of imminent importance to all of us.

I also notice in the very long list of available reports and future reports and future drafts that you had one on the impact of sea level rise on the world's major river deltas.

In another committee on which I serve, the Corps of Engineers is embarking upon a study, a joint study, on a project with the People's Republic of China. One of the areas that they will be investigating is just this type of coastal erosion.

Is EPA cooperating in that venture at all?

Mr. THOMAS. I am not sure about that specific one. We cooperate with the Corps on any number of issues. I can provide for the record information whether that is one we are working on with them.

Ms. BOGGS. I was just thinking that many of these studies would be very enlightening to the Corps members who will be going to China, and I am sure the Chinese would welcome them, as well.

Mr. THOMAS. We will follow up on that, Ms. Boggs.

[The information follows:]

CHINA/U.S. PROJECT ON COASTAL AND WETLANDS

Although the Environmental Protection Agency (EPA) cooperates with the Corps of Engineers on many issues, the Agency is not involved in the Corps' study with the People's Republic of China (PRC) on coastal lands, wetlands and erosion. A conduit for information exchange exists, in the form of a publication called *The China Exchange News*. This publication, produced by the Committee on Scholarly Communication with the People's Republic of China, provides updates on new and ongoing science and technology projects with China and is circulated quarterly to all U.S. organizations involved in research with the PRC.

LOUISIANA NPL SITES

Ms. BOGGS. Last year, as you may recall, I brought up the problem which the State of Louisiana has had in achieving additional designations to the national priority list of Superfund.

We have six on the list with two being actively worked upon; however, we have a list of from 50 to 60 additional sites which are critical. Unfortunately, in accordance with word from our Secretary for Environmental Quality, our State Secretary Patricia Norton, we have not achieved any further progress in adding these Louisiana sites to the priority list.

This is really an intolerable, frustrating situation because of the enormous contribution which Louisiana makes to the Superfund accounts.

I would like to share with you, and, Mr. Chairman, I would like to have it made a part of the record, a letter from our governor and a chart that outlines this problem and dramatically illustrates what the problem is.

[The information follows:]

State of Louisiana
EXECUTIVE DEPARTMENT
Baton Rouge
70804-9004

EDWIN W. EDWARDS
GOVERNOR

POST OFFICE BOX 94004
(504) 342-7015

January 30, 1986

Honorable Lindy Boggs
United States Representative
House Office Building
Washington, D.C. 20515

Dear Lindy:

As you know, Louisiana has had difficulty obtaining its fair share of Superfund money. While Louisiana's own environmental agency is operating on a minimal budget, the proposed Superfund bill will cause as much as one billion dollars of Louisiana industry money to go to EPA with less than a percentage of that money coming back to clean up the more than 300 remaining Louisiana sites.

I am sending you the attached brief on this issue and strongly encourage you to do whatever you can to correct this inequitable situation.

I will be happy to provide further information or to assist you in any way I can. I look forward to continuing to work with you on this issue which is of such vital concern to all Louisiana citizens.

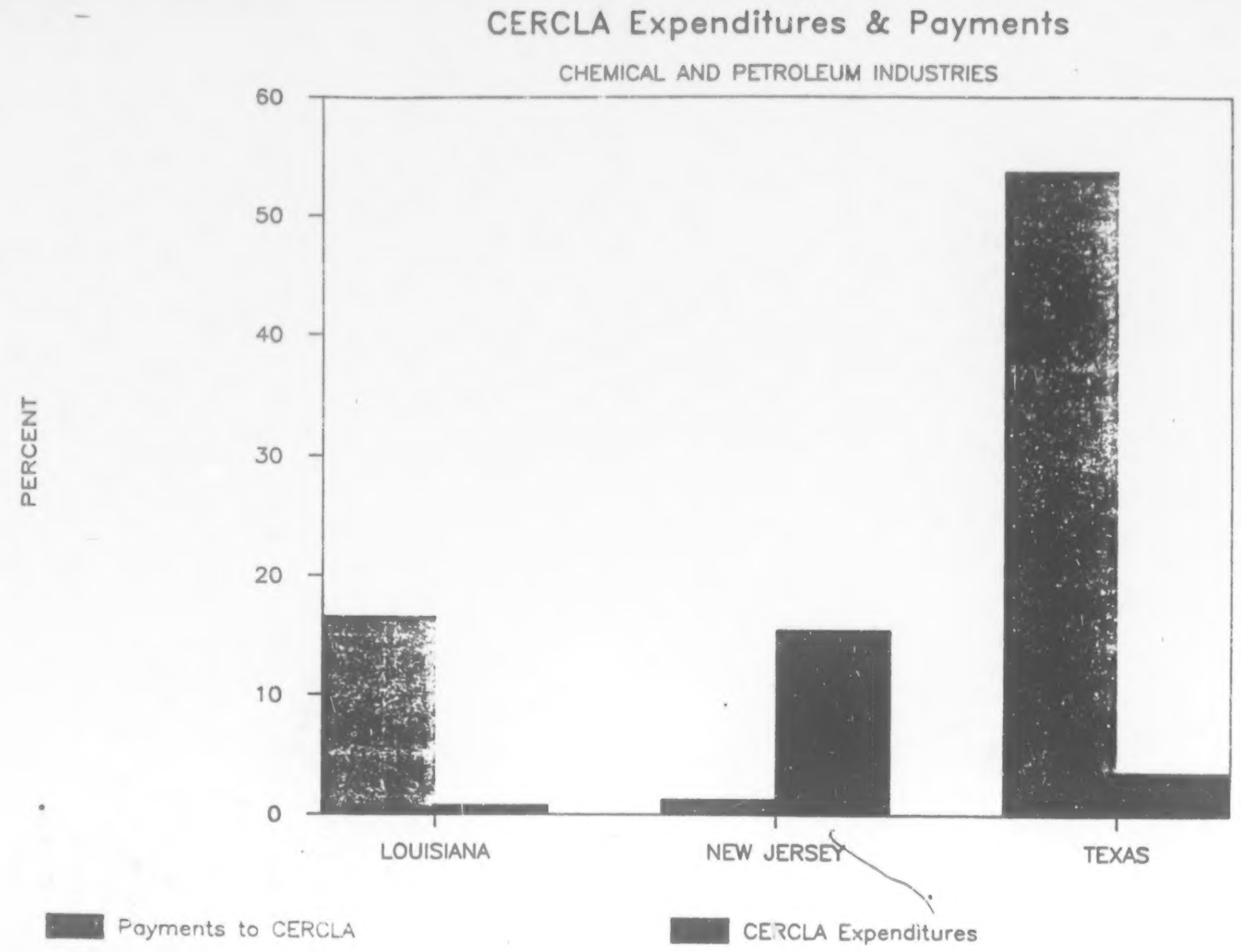
Kindest regards and my very best wishes.

Sincerely,

EDWIN W. EDWARDS

EWE:skm

attachment


CERCLA Expenditures & Payments

CHEMICAL AND PETROLEUM INDUSTRIES

Ms. **Boggs**. For instance, when you take the States and what has been obligated from the trust and add the fees paid into the trust, you have this type of a situation.

Louisiana receives $2,810,000 from the trust. It paid into the trust $77,132,840. Texas has the same proportion. They pay a larger amount, but it is the same proportion as Louisiana does. However, we have New Jersey which receives $51,593,000 from the trust and yet pays into the trust $5,988,000.

There are five NPL sites in Louisiana and 24 in Texas. Between them Louisiana and Texas have 126 of the NPL sites, but pay up to 80 percent of the annual $300 million Superfund taxes per year.

Now, I don't want to have a Boston tea party sort of situation in Louisiana; however, there must be more effort made to address the great differences between input into the program and efforts by EPA to clean up the many critical potential Superfund sites in Louisiana.

Could I have your comments on that, please?

Mr. **Thomas**. Yes, ma'am. Two parts of it.

First, in terms of Louisiana's ability of to get sites on the national priority list, we use a uniform hazard ranking system that is used all over the country to determine whether or not a site goes on that national priority list.

If it doesn't score high enough, if it doesn't present the same hazards as another site in another state, it doesn't go on the list.

The number of sites on that list reflects how aggressive the States have been to get sites on the list. The State of New Jersey was out front trying to get as many of their sites on that list as possible in the early days of the program. They have a lot of sites, too.

Louisiana was not. Louisiana has come back and has wanted to move additional sites on the list and has. I met with Ms. Norton, too. I am not sure why there is so much frustration there, Ms. Boggs, and why Louisiana can't get the sites on the list.

I have talked with our people, and there are one or two sites. There seem to be just one or two sites where there is debate as to whether or not they score high enough to be on the list.

Largely, the determination as to how bad a site is, whether it scores high enough to go on the list or not, is driven by Louisiana.

We even provided the money to Louisiana to do the site investigation. But we want to continue to work with Louisiana and try to provide as much assistance as we can to them in their site characterization and determine whether or not more sites can go on that national priority list.

And we have gotten to the point now where we update the list three or four times a year, so there are many more opportunities for Louisiana to get sites on the list.

Ms. **Boggs**. Mrs. Norton and the Governor both point out that Louisiana has a peculiar geographical makeup and these geographical conditions do allow movements of contaminants towards important drinking water acquifers, but the EPA ranking model ignores these sites until such time as the drinking water is actually coordinated.

Mr. **Porter**. That is not correct.

Mr. **Thomas**. Let me ask Win Porter to comment on that.

Mr. **Porter**. We have looked at that pretty carefully. I guess my feeling is that there is no technical factor that is overwhelming in that. What we look at is pathways to pollution, not actual pollution.

We look at pathways to the water, both ground and surface water, as well as potential pathways to the air. I will take a look at it, but I think there is not inordinate penalty to Louisiana from a geological standpoint.

We have done about 200 on-site inspections in Louisiana, and I think you will see more of those come out now. But, as Lee pointed out, the problem has been it is a one- or two-year process to get these sites on the list when you finish all the studies and so forth. Some of the other states moved out, smartly, two or three years ago. Louisiana didn't move quite as fast.

I would like to work with them, because some are very bad sites in Louisiana, and we are working at some of the ones now that are coming along pretty well, and we are trying to move those.

But I will certainly give that personal attention and may want to meet with Mrs. Norton again to talk about it.

Ms. **Boggs**. I would be very grateful if you could do that, because it is an extraordinarily frustrating situation and particularly in view of the economic conditions in which the State finds itself.

Mr. **Thomas**. The second part of your question that I would comment on was the issue of the taxes paid versus the benefit received to the State.

As you know, the mechanism that Congress used to fund Superfund, which I think is appropriate, was a feed stock mechanism. The concept was that those people who paid the taxes would pass the burden down, and you and I as consumers would ultimately pay for it through products.

With that mechanism, we are clearly going to have some States that appear to be providing a significant amount of money, because that is where the petrochemical industry is located, in your State, Texas, and others.

But that does not reflect who ultimately pays for it. Ultimately, through products, if a feed stock method works properly, we all will pay for it across this country.

That was the taxing mechanism Congress set up and how they wanted to develop the fund.

Ms. **Boggs**. I understand it is a congressional mandate that the fund be set up this way but we are having very, very stringent economic times in Louisiana.

We have so little money in the State fund that Mrs. Norton is naturally frustrated that she can't get more of the sites on to the priority list and be able to go ahead with the clean up. Regardless of how the mechanism is devised and works, Louisiana companies and citizens are paying for it.

Thank you.

Mr. **Green**. [Presiding.] The Chairman has asked me to keep things rolling while he is away.

Mr. Boner?

NASHVILLE AUTO INSPECTION PROGRAM

Mr. **Boner**. Thank you.

Mr. Administrator, I have a couple questions to ask about Nashville, Tennessee which is an area I represent.

An issue of importance to the residents of Davison County is the auto inspection and maintenance program that is required for the County to meet its clean air goals.

Two years ago, when the agency appeared before this Subcommittee, I asked the following questions, which are found on page 230 of the fiscal year 1985 hearing.

My question was: "I understand that the city projects that because of the various catalytic converters and other equipment on the cars that within three years it is estimated that Davison County would come under the standards or within the standards.

"Once the city does come within the standards, can it then drop the automobile inspection program?" And Mr. Cannon, who was the acting administrator for Air and Radiation, said, "we have not formulated the exact agency policy on that.

"My general inclination is and I am sure it would be the agency's advice, that once the area is in attainment with the ambient standards it is not any of our business what it is they do to continue attainment as long as they continue to demonstrate they will be in attainment.

"In other words, if they came to us and said we are now in attainment and we will remove the inspection and maintenance program and they could demonstrate that even with that removal they would continue to be in attainment, certainly they could do that."

My question is, what is EPA's policy with respect to discontinuing automobile inspection and maintenance programs?

Mr. **Thomas**. Let me ask Craig Potter to answer that.

Mr. **Potter**. Congressman Boner, if the State can demonstrate attainment without the I and M program, they can drop that program. Now, that is a slight expansion, I think, on the response you just read from Mr. Cannon.

The way I heard it, he said they actually have to show attainment. They can demonstrate that through modeling, but it would have to be demonstrated without the I and M program in order to drop the program.

Mr. **Boner**. What you are saying is if the State can demonstrate attainment and, of course, we are living under the States proposed plan, then the automotive inspection and maintenance could be eliminated?

Mr. **Potter**. That is correct.

Mr. **Boner**. What evidence must a jurisdiction provide to demonstrate they would continue to be in compliance with ambient air quality standards in order for an inspection and maintenance program to be discontinued?

Mr. **Potter**. It would be a complicated modeling exercise. You probably wouldn't want to have me explain, even if I could.

We can respond in some detail for the record, if you would like.

Mr. **Boner**. I would like just a summary of that data from the EPA.

[The information follows:]

INSPECTION AND MAINTENANCE PROGRAM

In order to discontinue its inspection/maintenance (I/M) program, a state must demonstrate to EPA that the area in question has attained the National Ambient Air Quality Standards (NAAQS) for ozone and carbon monoxide (CO), and that the emissions increases associated with discontinuing the program will not jeopardize attainment and maintenance of the standards.

A state wishing to be redesignated as attainment for ozone and CO must submit a request with supporting data to EPA which meets the requirements of EPA's redesignation policy pursuant to Section 107 of the Clean Air Act. Redesignation for CO requires that the eight most recent quarters of air quality monitoring data show no exceedances of the NAAQS for CO. Redesignation for ozone requires that the twelve most recent quarters of air quality monitoring data show no more than an average of one exceedance of the NAAQS per year. If twelve quarters of monitoring data are unavailable, the most recent eight quarters of monitoring data must show no exceedances of the NAAQS for ozone. A redesignation for ozone may also be made on the basis of four quarters of monitoring data with no exceedances if the state provides evidence that emission reductions (not simply planning demonstrations) have taken place in the area, and if the state provides evidence that such emission reductions are commensurate with the improvement in air quality.

Redesignation for ozone and CO also requires that the state provide evidence that the fully approved State Implementation Plan for the area has been implemented, and that the improvement in air quality is not due to an economic downturn.

After considering a state's request for redesignation, EPA will publish its findings in a *Federal Register* proposal and solicit public comment for 30 days. EPA's final determination will then be promulagated in the *Federal Register* under 40 CFR Part 81.

Mr. BONER. The National Air Data Base shows the four monitoring sites in Davison County have not reported any violations for carbon monoxide for the first nine months of 1985. The last quarter records will be given to EPA in April.

What weight would be given to this record in EPA's evaluation of their request to discontinue the automotive inspection and maintenance program?

Mr. POTTER. That would be factored into the modeling exercise. The Office of Mobile Sources works quite frequently with localities on modeling exercises that would demonstrate attainment. They are very good at providing that kind of assistance.

So, we can work with them on that and we can also respond to that in writing, as well.

Mr. BONER. Okay. Thank you.

Is there any instance where an inspection and maintenance program was started to bring an area into compliance and was later discontinued?

Mr. POTTER. I am not absolutely sure. I would guess that there are, but I am not sure.

Mr. THOMAS. We could provide that information.

Mr. BONER. I would like to know.

[The information follows:]

INSPECTION AND MAINTENANCE PROGRAM DISCONTINUATION

To date, no state with an operating inspection and maintenance (I/M) program has requested an attainment redesignation for the purpose of discontinuing its I/M program.

TRUCK EMISSIONS REGULATIONS

Mr. **Boner**. I understand truck diesel engines are a major source of nitrogen oxide which becomes ozone. Last year, EPA promulgated regulations to control those emissions; however, these control emissions do not go into effect until 1987.

Am I correct on that? It is 1987?

Mr. **Thomas**. The heavy duty and light duty truck regulations we promulgated last year, Congressman, had a series of dates for new standards to be established, 1987, 1991, 1994, both as it related to nitrogen oxides and particulates.

Part of that was because they were technology forcing regulations, and part of it was because of timing of model years, when the manufacturers' new models will go out.

Mr. **Boner**. When you take into consideration the road life of a truck compared to that of a vehicle, is it probably going to take about 15 years for all the existing trucks to be replaced with new trucks meeting emission control standards?

Mr. **Thomas**. I am not sure of the exact life cycle we look at on heavy duty trucks, Congressman, in our models. That figure, the years that you indicated, sounds reasonable.

One of the things we look at, for instance, in automobiles, is fleet turnover, and we look in terms of ten and 15 years when we look at the majority of fleet turnover with new emissions controls.

Mr. **Boner**. Let me ask you another question about the Davison County I and M program. When they say "attainment," is attainment the same as what you would call maintenance of air quality standards in order for the I and M program to be continued?

For an example, Davison County has already attained one air quality standard.

Mr. **Potter**. Attainment includes all the criteria pollutants. They have to meet the standards that have been established, so it could be, for example, for carbon monoxide and the other criteria pollutants.

Mr. **Thomas**. A key thing, Congressman, I have run into with a lot of localities as we talk about inspection and maintenance programs as well as others, is the issue of, if you are going to a model, whether you are going to continue in attainment or not, you have got to do that, as Craig said, without the I and M program?

If they want to discontinue the program, they have to model the air quality levels without that I and M program. Generally, that program accounts for a significant amount of reductions; the inspection and maintenance program is concerned about carbon monoxide. Therefore, to model attainment without it, you have got to have other significant controls in place.

EQUITY OF I AMD M PROGRAMS

Mr. **Boner**. One of the concerns of many of the residents in Davison County has been that the air quality standard testing was done just in Davison County, and you have had this, I am sure, with other urban counties where you have a large number of vehicles coming into the county that will emit the various pollutants while they are there. Yet the owners live and their cars are registered outside in another county. For all practical purposes, this means that we haven't been able to get to those cars to meet the standards in Davison County. In fact, you have a number of cars that were once registered in Davison County that are now registered outside the county.

What consideration is being given to that, and what would have to be done to force the surrounding area, for example the metropolitan statistical area, to come into the testing program? Obviously, there is an inconsistency here if you are going to place a standard on a city, yet, not give them the ability to enforce that program upon those vehicles which come in on a regular and routine basis.

Mr. POTTER. This is an inequity that is frequently expressed when we talk about I and M programs. The thing you need to remember, and everyone should remember, is that regulations are developed through the States.

In some States there are more strict requirements than in other States. We try to work to implement the standards as even-handedly as we possibly can, but the other side of the coin, of course, is that in doing the measuring, if we don't take those samples in the areas that we are dealing with, we don't have any valid information at all.

So, it is a tough problem that we have to work through on a case-by-case basis. Generally, I think the Office of Mobile Sources has been pretty effective in being responsive. We can ask them to take a look at this.

Mr. BONER. I am sure Davison County is not the only location. What have you done in other cities?

This, as I said, as you know, is not an abnormal situation, and you are well aware of that. Here we have the Federal Government coming in and placing certain standards on the area.

But at the same time the residents of Davison County are being unfairly penalized by being required to come into compliance, and yet for a good percentage of those who are violating the standards there are no provisions to require them to come into compliance.

Mr. THOMAS. Congressman, it is an equity problem. We try to take into account the total number of cars that will go through the I and M program in a locality when we try to monitor whether that I and M program will bring it into attainment or not.

One of the things we find is, States and localities, particularly States, will work to try to limit the inspection and maintenance program as narrowly as possible and still reach attainment.

If you were going to do it in an equitable fashion, if you were going to do it in a fashion that would give you the greatest environmental gain, you would put in place a statewide inspection and maintenance program, and you would probably do it through a centrally managed program with decentralized stations.

That would be equitable. That would be the most efficient way; but that would also probably generate the greatest political heat in the State.

So what we find is States want to know, what is the least they have to do in order to meet attainment. They will narrow it down to the smallest portion possible of the area that is out of attainment, and you end up with the things you have been describing in that area.

I have got them in other states just like that. We are only doing it in one county, because that is the minimum we have to do and still reach that attainment.

Mr. **Boner**. In essence, what we are really saying here is the determination of that is made by the State on the State level through its program and not by EPA.

EPA's requirement is that you meet certain air quality standards, but it is the State that determines what that mechanism will be whereby you attempt to achieve those standards.

Mr. **Thomas**. That is correct. It is a performance standard, and the State determines how broad they want to make it, how narrow they are going to make it.

They can't make it so narrow that they won't meet the standard. So they bring it down, oftentimes, as narrow as possible to meet the standard.

Now, there is one area—and I don't know whether Nashville falls into this or not—but there is one area of law where, if an area was supposed to reach attainment by 1982 with certain standards and they did ask for an extension to 1987 then we could grant them an extension. But a condition of that extension was that they had to put in place an inspection and maintenance program by law—now, if they were subject to that section of the law then that limits to a certain extent the flexibility a State has.

But the kind of inspection and maintenance program, whether it is tail pipe or antitampering program, or how it is managed, how narrow the area should be—there is a good bit of flexibility the State exercises.

Mr. **Potter**. I would add we do let the States design a program. That is an important thing.

The second thing is something I think the committee might want to be aware of. RACT was designed in 1978 based on a New Jersey situation and in some cases is now being criticized as not being restrictive enough.

This relates, of course, to the ozone problem we are facing now. So, we are up against that problem on the other side of this issue, as well.

Mr. **Thomas**. I would say, as we look at the ozone problem around the country, and particularly as we look at our 1987 attainment date coming up, is probably going to be the biggest problem we face for attainment in 1987.

You are probably going to have 40 to 45 major metropolitan areas around this country that are going to have major problems meeting the 1987 attainment date.

You are going to see those areas facing very difficult decisions. Enhanced inspection and maintenance programs are going to be one of the things localities around the country will have to face up to.

RURAL WATER ASSISTANCE PROGRAMS

Mr. **Boner**. Thank you.

I have one last question. EPA has not requested funding for your rural water training and technical assistance programs.

This committee has repeatedly been advised of the value of this program in increasing the effectiveness of small rural water systems. I personally think it has been very successful in Tennessee.

Why are you proposing no funding for this effective program?

Mr. **Thomas**. Congressman, I also feel it is a good program, but in the context of trying to establish priorities in the agency we felt that area of technical assistance was one States would be able to provide. Therefore, we did not request funding for that project.

Mr. **Boner**. Did EPA request funding for that program in its initial request to OMB?

Mr. **Thomas**. I believe we did.

Mr. **Boner**. Then it was rejected by OMB?

Mr. **Thomas**. It was, and we did not appeal it.

Mr. **Barnes**. Congressman, we did request that money, initially, as part of the aggregate of State grants that we wanted to see included in the budget.

When we got our pass back from OMB—I think it was $255 million—we felt when we had to array the grants on a priority scale within that we didn't feel this one came up to it.

Mr. Thomas did appeal the figure for State grants, and additional money was put into the program by the President. We also looked within the agency and added some money ourselves.

Mr. **Boner**. Thank you, Mr. Chairman.

ENVIRONMENTAL BLOCK GRANTS

Mr. **Boland**. Let me ask you a bit about the President's 1987 budget requesting a major policy change in State grants.

My understanding is that it would roll six or seven of the programs into an environmental block grant. I understand there is legislation going to be proposed. Has that been proposed?

Mr. **Thomas**. Mr. Chairman, there are two issues. One is fees, and the other is consolidated grants, or block grants. Both of them I am dealing with and both are reflected in the 1987 budget request.

On consolidated grants, we have put together a work group composed of the people within our headquarters and regions and State participants.

Is there an ability to combine our funding to assure the integrity of the media specific actions that we want taken while, at the same time, providing some flexibility to the States to make the environmental risk assessment that we talked about earlier to determine whether there is a higher priority in one area or another? Should some of the funding be available in one area versus another?

Now, I have been on both sides of block grants. I have managed them at a Federal level. I have received them at a State level. I think there are a lot of pros and cons.

We want to look hard at the issue with State participation, see if we can develop a proposal. I think there are both administrative and environmental benefits that could arise from a consolidated grant.

If we can arrive at a proposal that makes sense from both of those points of view, we would like to come forward and discuss it with Congress, particularly with this Committee, as a possibility.

But that is the process we have underway to work with States over the next several months to see if we can do that.

Mr. BOLAND. Is this a proposal that was floated back in 1981 or so, to develop an environmental block grant to the States?

Mr. THOMAS. I would say that proposals that have been floated in the past talking about block grants are not the same proposal, in my mind. When I talk about a consolidated grant program, I am talking about something very different than just a block of money to the States.

Mr. BOLAND. Block grants always sound pretty good. You get local flexibility and you cut red tape and all that sort of thing. I hope you are not equating this with the general revenue sharing or CDBG, because in EPA's programs the States are responsible for enforcing Federal statutes with respect to pollution.

So, there is a real fundamental difference here.

Mr. THOMAS. There is. The accountability issue is a key issue that has to be factored in.

As a matter of fact, as we have developed our performance based grant policy where the States and I have had probably the most discussion over the last couple of years is on that accountability factor.

Mr. BOLAND. Don't the EPA regions sit down with each State and negotiate specific outputs, and the States have got to satisfy EPA before they get the money?

Isn't this a better way of doing it?

Mr. THOMAS. It is a good way of doing it, and it is the way we go forward. The constraint we have now is we do that for each media, within the constraints of the amount of money that is available for hazardous waste or underground storage tanks or whatever.

If we had a consolidation, it could possibly cut some administrative red tape but also give the states some flexibility across programs. If the State came in and laid out a priority scheme that reflected some higher environmental risk in say the tank area, than in the waste or air area, there would be some flexibility to see if we could modify the overall amount of money to that State or give them the flexibility to modify it within constraints to deal with that risk.

So, that is the concept I am suggesting.

REPROGRAMMINGS

Mr. BOLAND. Let me point out one problem we hope doesn't occur again.

You probably understand we don't try to micromanage the EPA nor any other agency or department that comes before this Committee.

We rely on the reprogramming process instead of earmarkings in the bill that usually agencies are opposed to.

I think this program has worked rather well. We probably use it more than a lot of other subcommittees on appropriations, but I think it is an effective one.

My own judgment is, and it is the judgment of the Committee members, that it is beneficial to the Committee and, I think, sometimes beneficial to the agency involved.

Last year we had some problems with respect to the construction grant program. You recall that the Administration proposed legislation to eliminate eligibility for new starts in the construction program.

No action has been taken in Congress on this proposal. But in October, OMB and EPA tried to make that change administratively. What about this?

Mr. **Thomas**. That was a suggestion on the part of OMB. It was one that I didn't agree with for two reasons. One, because I feel we have been able to work together very effectively in your oversight and our management of the budget, and two, I didn't agree with the substance.

Mr. **Boland**. On a legal basis, how does the General Counsel feel about it? If you were still writing—I just want to ask the question—if you were still writing opinions, what would your opinion be?

Mr. **Kinghorn**. The General Counsel, at the time, advised my office. We believe there is questionable legality over the action.

Mr. **Boland**. You question the legality of it?

Mr. **Kinghorn**. It was resolved before we had to go to the wall.

FY 1986 CONGRESSIONAL ADD-ONS

Mr. **Boland**. Another problem arose over the $106 million we added in our 1986 appropriation bill. I don't know. Maybe you didn't think those add-ons made sense. Did they make sense to you?

Mr. **Thomas**. I always think what you do makes sense, Mr. Chairman.

Mr. **Boland**. This Committee, I think, is probably more concerned about the pork barrel process and also peer reviews than almost any other Committee in the Congress, probably the only one that is concerned about it.

The add-on money was initially held back until the fourth quarter, and that caused a bit of confusion. What about that?

Morgan gave the last answer. Why don't you give this one?

Mr. **Kinghorn**. Do you mean the add-ons for 1986, Mr. Chairman? We withheld providing any of the add-ons until we were convinced in December of the nature of the Gramm-Rudman reductions. All the dollar add-ons were provided in the appropriate places, minus the 4.3 percent.

Because of the 1987 request, the only area that we cut back was the work year add-ons. We have planned to use 80 of the 280 work years you provided, because we feel until 1987 is certain, we didn't want to build up some of these programs and then have to cut them back and possibly have to get rid of some people.

So, all the dollars you added are in the appropriate places.

Mr. **Boland**. Let's quit now for lunch and come back at 2:00 o'clock and start on air.

Afternoon Session

AIR PROGRAM

Mr. **Boland**. The committee will come to order.

This afternoon we will get into the air program.

The Assistant Administrator is Craig Potter. The overall request in this particular area is down about 3.6 percent below the Gramm-Rudman-Hollings levels—$239 million, down from $248 million; work years decrease as well by 39.6 FTE. The bottom of A-3, the last paragraph on that page, indicates that three actions will be taken in 1987 on National Ambient Air Quality Standards for particulates and sulfur dioxide. Last year you indicated these three actions would take place in 1986. Is there any reason for that slippage?

Mr. **Potter**. The PM-10 NAAQS has been delayed, to everybody's dissatisfaction. We have additional information brought to our attention through the peer review process and through the Clean Air Science Advisory Committee (CASAC) on health effects and we are in the process of taking that into consideration in the context of the rule making.

That has unfortunately delayed the PM-10 NAAQS, Mr. Chairman.

NITROGEN DIOXIDE STANDARD

Mr. **Boland**. When are you scheduled to review the nitrogen dioxide standard?

Mr. **Potter**. I am not sure what the proposal date on that is. I don't know the answer to that. Can we provide that?

Mr. **Boland** Yes, you may.

[The information follows:]

Nitrogen Dioxide Standard

In June 1985 EPA promulgated a reaffirmation of the existing National Ambient Air Quality Standard (NAAQS) for nitrogen dioxide. At that time, the Agency committed to an accelerated research program to assess the short-term effects of nitrogen dioxide. In the fall of 1985, EPA reviewed the status of that research program and concluded that insufficient information was available to warrant accelerated review of the NAAQS. The research program is continuing, with the next evaluation of results scheduled for the fall of 1986. At that time, we will again determine whether sufficient evidence exists to warrant review of the NAAQS on an accelerated schedule. Under the normal review cycle, a revision or reaffirmation of the NAAQS would be proposed in 1988, with promulgation in 1989.

NSPS

Mr. **Boland**. On page A-7, under the NSPS proposals at the top of the page, as a result of the Congressional add-on, the number of proposals increased in 1986 from the original request of six to fourteen. Why do the NSPS proposals then plummet in 1987 to only one?

Mr. **Potter**. What we are seeing is a maturing program. If you look at the proposed schedule, by the end of 1987, it will be approximately 85 percent complete.

Mr. **Boland**. Are you losing some momentum on these proposals then?

Mr. **Potter**. We have had a tradeoff in the air quality and stationary source planning standards between NSPS and NESHAP. There is no question about that. I think that would have happened under any circumstance.

NSPS will clearly peak in 1986, and it is reflected in the number by a large increase that year.

HEALTH EFFECTS INSTITUTE

Mr. **Boland**. On A–10, the third of this table indicates altogether research is down in the air program by over $7 million, from $44 million to $37 million, and the biggest reduction is in the health effects, reflected on page A–19. In the past years the budget request had included a specific sum for the Health Effects Institute, about $3 million.

There isn't any mention of that particular program in this budget this year, but the Committee has been told informally that some funding will continue. What is the situation there?

Mr. **Potter**. I think it is correct there is no request. We had a meeting last week with the Board of Directors of the HEI, which I attended. Don Ehreth has been involved in this and perhaps he would like to answer.

Mr. **Ehreth**. We are going to fully fund the HEI project for $3 million in 1986.

Mr. **Boland**. Where are you going to get the $3 million?

Mr. **Ehreth**. We have it in the 1986 budget.

Mr. **Boland**. What about 1987?

Mr. **Ehreth**. This year we will be evaluating that program and be funding HEI, but it will be based to a degree on the amount of work, the kind of work, and we have been negotiating that process and have not reached that stage.

Mr. **Boland**. Are you impressed by the work HEI does?

Mr. **Ehreth**. We have about 25 projects due this year. We have both agreed, HEI and us, it is time to review that whole process. We are, however, favorably disposed toward the experiment, and towards the concept.

Mr. **Boland**. We want to make sure you are favorably disposed and we may have to put the $3 million in there. You wouldn't object to that, would you?

Mr. **Ehreth**. Very difficult for me to object to anything you would like to do, sir.

Mr. **Boland**. I am impressed with the HEI approach and I wonder if that ought to be expanded into other areas like pesticides, to target a particular pollutant and do a very objective analysis, something the scientists can agree on whether they are for or against, and make a determination on what the proper conclusion would be. What about that?

It seems that you get a better and more objective analysis and quicker conclusion with this kind of a program than you do where you have adversaries fighting each other all the time over the science.

Mr. **Ehreth**. I think that is one of the strengths of the program. Our overall program uses the peer review process. We are having talks with HEI now to look at the possibility of focusing attention on air toxic issues, organics. In other words, some of the indoor air related health studies and a broad range of things. I think they are also more than interested in trying to expand into other areas.

Mr. **Boland**. As Mr. Green, and I am sure Marty knows, too, HEI really has been particularly interested in auto emissions. That is the sole area in which they are addressing their particular investigations.

They have something like, as I remember, 47 investigators out in the field getting a look at this. After they make their particular conclusion, the findings reached by the investigators are reviewed by HEI to make a determination whether that conclusion is a good one.

So I take it that you are satisfied with the quality and the objectivity of that particular institute?

Mr. **Ehreth**. We are certainly satisfied with the quality of the scientists involved in the program. We both will be looking at the quality of the products and the applicability of the products this year.

Mr. **Boland**. I would suppose that the EPA would welcome that particular approach rather than fighting with the industry and our own people on what money should be expended, whether it is auto emissions or any other types pollutant.

Mr. **Ehreth**. It has some strengths in that regard for sure, but in the meantime whether any of our other criteria also go back the CASAC group which both parties do respond to in a case like that with an independent peer body. We use the peer review process extensively whether it be the HEI format or the other.

Mr. **Boland**. Is there an effort here on the part of EPA to piecemeal the amount of money that might be extended to the HEI so you would have more control over what it does?

Mr. **Ehreth**. I think independence is a part of what they have to achieve and retain. In the meantime, there is a certain degree of relevancy that also has to be achieved to satisfy the needs of the program regulatory process.

AIR TOXICS

Mr. **Boland**. Some would argue the air quality is a mature Federal program and that funding should naturally be decreasing. I don't think this is the general opinion among the States.

They believe we have just opened the Pandora's box on air toxics. Is that a good conclusion?

Mr. **Ehreth**. I think our budget does reflect a shift of our national ambient air quality research into the air toxic areas. I would add something to what Craig said about the fact he has several rulemaking actions before him this year.

Our process is that when a rule is promulgated, we sit down with our colleagues in Craig's shop or any other organization over there and begin to develop a research plan to fill the gaps that were identified during the regulatory decisionmaking process.

As those regulations come closer and closer to promulgation, that is the process we will employ to determine whether or not more resources need to be moved back into that area.

Mr. **Boland**. You wouldn't say that the job is winding down in this area, would you?

Mr. **Ehreth**. I think Mr. Thomas indicated before that we got to a point where some of these studies were coming to completion and rather than start new studies we wanted to take some of that money and put more emphasis on exposure and air toxic related studies.

Mr. **BOLAND.** You probably know the legend on A-33, the second paragraph from the bottom of the page, the last sentence there says, "The decreases reflect changes in developing controls for toxic air pollutants."

Mr. **POTTER.** Mr. Chairman, maybe I can respond to that. I think one of the things that is happening is we are seeing a shifting emphasis from management and monitoring to more enforcement and dealing with emerging problems.

That is really what we have come across with air toxics. I think air toxics is a serious problem. I think many people don't understand exactly how serious it is and we are dealing with a perception problem to some extent.

We are also dealing with a very complex programmatic effort. We are dealing with area sources and categories we have never even considered before.

It is, again, an expansion of the discussion we had earlier this morning on SO_2 and acid deposition. Our ability to measure the presence of pollutants, is sometimes much more successful than developing control technology to deal with it.

There is a shifting emphasis, however, and I think the States generally feel it is a valid shifting emphasis that is more in the direction of enforcement and dealing with some of these emerging problems.

TOXICS AIR MONITORING NETWORK

Mr. **BOLAND.** On A-52, the second paragraph from the bottom of the page in the last sentence in that paragraph mentions that the toxics air monitoring network, TAMs, will be expanded to two sites in three cities.

That isn't much of a network, is it?

Mr. **EHRETH.** That is the research phase. What we will be doing is increasing the number of sites within the three cities we have currently and in 1987 we are actually planning on going to I think it is 20 sites so it might be a typo error. I can clarify that for the record.

[The information follows:]

INFORMATION ON THE TOXICS AIR MONITORING SYSTEM (TAMS)

The Toxics Air Monitoring System (TAMS) is designed primarily as a research monitoring program to develop methodology and gain a better understanding of the manner in which outdoor toxic chemicals should be measured. Initially a pilot program of one site in each of three cities, TAMS is now being expanded to two sites in each city, for a total of six stations. In 1987, the network will be expanded to four sites in these same three cities (i.e., twelve stations) to gain more information on the spatial variafility of pollutant concentrations and the best site configuration for monitoring them. Ultimately, two other cities will be included with 4 sites each, for a total of 20 stations.

The focus on the program is limited. The network is not intended to provide a national picture of toxic pollutant levels, because five cities would be inadequate for that purpose. Rather, the purpose is to develop and test methodologies in actual use to better understand how toxic chemicals should be monitored. If a national network were established, the Federal, State, and local agencies operating that network would make use of information that will be obtained from the TAMS research monitoring effort.

AIR GRANTS

Mr. **Boland**. On page A-37, this table shows the request for the air State grants of $95 million. That is slightly before the current Gramm-Rudman level and about $5 million below the 1986 enacted level. How much can the States do in launching their toxic programs if the base grant is being reduced?

Mr. **Potter**. I think what we are trying to do is increase the amount of money that is available to deal with State program capacity. I can't answer that question in terms of the base grant money.

I think what we have seen is a significant increase to $13 million in the 1987 proposal for air toxics. This is a new area. It is an area where we are now beginning to understand things that we didn't understand before.

It is an emerging problem. It is not really a base grant problem as much as it is an emerging problem.

Mr. **Boland**. The EPA's 1985 study found that the total number of State and local air pollution employees dropped by 21 percent from 1978 to 1984. Does that give you any worry at all?

Mr. **Potter**. I think in some sense it does. I think one of the things that has happened, and it relates to the point I was making about management and monitoring, is that we have got to approve a lot of the SIP processing business. That was to some extent labor intensive in terms of State grant activities.

But I think a decrease like that gives us some concern.

AIR MONITORING EQUIPMENT

Mr. **Boland**. The study also indicated the air monitoring equipment is getting old and wearing out and not very effective.

Mr. **Potter**. That is something we are very concerned about.

Mr. **Boland**. You don't get very good scholarship on that kind of equipment, do you?

Mr. **Potter**. No, we don't.

Mr. **Boland**. Sometimes I think that is one of the problems EPA has with the kind of monitoring that comes out of that kind of equipment. Will you supply for the record what the total replacement cost is, the remaining life of the equipment and the amounts budgeted in 1985, 1986 and 1987, and also how many State air quality programs address indoor air problems.

Can you supply that for the record, too?

[The information follows:]

Air Monitoring Equipment

The total number of ambient air monitoring instruments in state and local air monitoring networks is approximately 4650. The total cost to replace these instruments is slightly over $30 million dollars. We estimate that approximately 20 percent of the existing instruments are in poor condition (need to be replaced), 30 percent are in fair condition, and 50 percent are in good-to-excellent condition. The average life expectancy of monitoring equipment is estimated to be from five to seven years. A breakdown of the costs by pollutant is provided below. EPA budgeted $2.0 million in 105 state grant funds in 1985 and 1986, and $0.5 million in 1987 for replacing worn-out equipment. The reduction in 1987 reflects a redirection of grant funds to air toxics activities.

Pollutant	Number monitors	Replacement costs/monitor	Total cost (millions)
Total suspended particulates	2,390	$3,500	$8.4
Sulfur dioxide	550	13,800	7.6
Nitrogen dioxide	250	13,400	3.4
Carbon monoxide	440	9,400	4.1
Ozone	620	8,400	5.2
Lead	400	3,500	1.4
Total	4,650		30.1

EPA has not done a detailed inventory of the number of state air quality programs which address indoor air problems. Many agencies do respond to complaints or inquiries about indoor air quality. Some agencies conduct investigations of buildings, including monitoring of indoor pollutant levels, where there appears to be a problem. Organizations representing state and local air pollution control and public health agencies polled their members in 1985 and asked the numbers of complaints and inquiries received about indoor air. The 68 agencies responding indicated they had received a total of 6760 inquiries or complaints during the past 12 months.

LEAD PHASE DOWN—FARM EQUIPMENT

Mr. **Boland**. The 1986 bill called for a study of the effects of the lead phase-down on farm equipment. That report is due January 1, 1987. Have you made any progress with that study and what will it cost?

Mr. **Potter**. That study is coming along pretty much on schedule. We are close to agreement on the site design and the engines that will be tested. We have agreed with the Department of Agriculture and we have a group, the National Institute for Petroleum Research, to conduct the tests.

There have been a number of other interested groups, American Farm Bureau and others, who have been involved in the selection process and the design of the study. We also plan to come up here and get involved with Congress very shortly on what we plan to do in this study.

Mr. **Boland**. How much will it cost?

Mr. **Potter**. The amount we have budgeted at the present time is $750,000, and we are looking for the other $250,000.

Mr. **Boland**. Are you looking for reprogramming in this area?

Mr. **Potter**. We may have to, Mr. Chairman.

Mr. **Boland**. Will you make that January 1st deadline, do you think?

Mr. **Potter**. I think so, based on what I know about this. We will go back and look and see and I will get back to you on that.

I think that is pretty well on track.

[The information follows:]

Lead Phasedown on Farm Equipment

The Administrator of EPA has committed the Agency to a farm machinery testing program that will be carried out in 1986. A final report is scheduled for January 1, 1987, which is the deadline in the 1985 Farm Bill. The testing program will determine the effects that low levels of lead and alternative additives in gasoline have on engines designed to use leaded fuel. EPA is now entering into an interagency agreement (IAG) with the Department of Energy. The IAG allows the use of a respected testing firm already under contract with DOE and is the only practical way for EPA to complete this study in the very short time frame set by the Farm Bill. The work plan and quality assurance plan for the study will be reviewed and approved by both EPA and the Department of Agriculture. In addition, a consultant acceptable to both EPA and the Department of Agriculture will be used for independent evaluation of the test program.

INDOOR AIR RESEARCH

Mr. **Boland**. We have talked a little bit about indoor air research. Over the past three years this Committee has pushed EPA into indoor air research. We have added money each year. We have insisted on coordination between EPA and the other agencies involved and we have required that a long-term comprehensive strategy be developed. For the first time the 1987 budget does include funds for indoor air research. Does that indicate a significant change in policy?

Mr. **Barnes**. Mr. Chairman, I want to address that question. I think the Administrator felt very strongly about indoor air. He looked at the research we had, results we have had in various areas last year, like the TEAM study you referred to this morning which is seeing a number of signals out there that suggest we pay more attention to that. We made that one of the priority items as we went into our discussions with the Office of Management and Budget.

Mr. **Boland**. How much of the $18.4 million for health effects as reflected on page A-19 will be devoted to indoor air?

Mr. **Ehreth**. There are about six studies co-funded by Indoor Air money as well as base program money.

I don't have the exact amount and we can provide that for the record.

Mr. **Boland**. All right.

[The information follows:]

Resources Devoted to the Health Effects of Indoor Air

The indoor air health effects budget for FY 1987 is $100,000 for salaries and expenses, $400,000 for research and development, and one full-time equivalent position. These resources will support bioassay studies of combustion products and volatile organic compounds, human chamber studies, and special epidemiology projects for organic compounds. In addition, planning for an indoor air component of the next NHANES-III (National Health and Nutrition Examination Survey) will continue.

INTERAGENCY INDOOR AIR PROGRAM

Mr. **Boland**. In January the Committee requested a detailed research plan for the Interagency Indoor Air Program, including the specific projects that were planned. Has the CIAQ, the interagency coordinating committee, completed the research plan?

Mr. **Ehreth**. At this very moment I have my staff, as well as the staff and the other three co-chairs from other agencies, running frantically around town to finish that response. Unfortunately, whereas we wanted to have it here by this time, it does not look like we are going to have it finished and through each of the agencies' clearing process until approximately the first of the month.

The interesting thing coming out of that is, of the six areas that were identified in the original strategy, one glaring gap was in the area of exposure and that is a strength EPA can bring to the overall plan so, that is where we are focusing in.

Mr. **Boland**. Are you having any problems with other members of the coordinating committee with reference to this?

Mr. **Ehreth**. I would be less than honest if I said it was all peaches and glory. We have 16 agencies plus the Gas Research Institute, EPRI, and home builders associations and academia and everybody else involved in a $2 million program. There is going to be difference of opinion.

I think we have agreed to disagree in many cases; also each of the agencies or departments has their own mission to fill. Some of us have strengths in certain areas.

We are trying to focus those strengths on bringing about the answer to the problem as quickly, as expeditiously as possible, and with the greatest degree of utility.

Mr. **Boland**. Did this plan undergo a formal approval process within the CIAQ?

Mr. **Ehreth**. We have many work group levels and field studies, work groups which my colleagues from CIAQ share. About two or three months ago we were talking combustion byproducts as our plan. I am sorry, are you talking about the survey plan or the overall plan?

Mr. **Boland**. We are talking about the field survey.

Mr. **Ehreth**. That has gone to that field survey or field studies group for review. The recommendation from our own agency and other agencies suggest we ought to be focusing on organics and perhaps even on targetted health studies, but when we review the work being done in all the different Federal agencies and see the gap in exposure, as Mr. Thomas said this morning, characterizing the extent of exposure to air pollution, is what we want to focus on.

Mr. **Boland**. I think you have a letter from us indicating we are not necessarily looking for a national survey and what we are really looking for is a balanced, cohesive research plan. I presume that is what you are looking for, too.

Mr. **Ehreth**. That is what we are trying to draw out of all this by working with everybody.

Mr. **Boland**. What will it cost in 1986? Do you know? And also 1987?

Mr. **Ehreth**. In 1986, it will be a little over $1 million; in 1987, it could be as high as $1.9 or $2 million. The survey is designed in phases such as when we are able to get enough information to test some of the hypothesis, we can stop it and go into the targetted studies.

It called for the survey first and the study second.

Mr. **Boland**. Do you have any idea how many cities and how many homes will be in the survey?

Mr. **Ehreth**. Yes, sir. We are using a matrix of 50 by 30, 50 different locations and 30 homes in each location, so it will be 1500 actual sites we will be looking at with about two weeks at each site.

I suggest you might be interested, or staff might be interested, in a briefing on that particular study. We would be more than happy to do that.

We have come up here a number of times and it would probably be very useful if we did that again.

Mr. **Boland**. I think probably we would welcome that. I have some additional questions and they may be satisfied by the briefing.

Is there a split among the scientists with reference to this particular program?

Mr. **Ehreth**. Yes, sir. The health people would like us to focus on health specific studies. Exposure people would like us to focus on the exposure specific studies.

What we have is a lot of information on concentration and presence of or absence of. What we don't have is a good handle on time of exposure.

In other words, we don't have good exposure data. So you need good exposure data to be coupled with health effects data in order to come up with the risk numbers. That is a gap we are trying to fix.

Mr. **Boland**. I understand there was a meeting at EPA's Research Triangle Park. According to Dr. Speizer of Harvard, who chaired the meeting, the overwhelming sentiment strongly opposed the national survey. "No new information could be obtained and such a study would be useless."

Mr. **Ehreth**. We have talked to Dr. Speizer about that particular thing. His theory or hypothesis is we know where all the organics are coming from. They are all coming from consumer products. What we don't know is, first of all, is that correct, and second, which consumer products constitute a problem.

One of the goals of the CIAQ is not only to identify the chemical or source of chemicals causing the problems, but also which piece of legislation in which agency would have the primary role for dealing with the issues.

They were also in the RTP evaluating the health effects program as opposed to the overall program.

Mr. **Boland**. What about the assertion that a statistically based national survey is really not needed?

Mr. **Ehreth**. Well, I think we need to have some statistics. It has to be statistically based. When we develop any survey like this we establish certain data quality objectives and goals from the data so we have to know the degree of confidence we can depend upon from the data collected.

So what we have designed here is a minimal study that will be able to evaluate two or three different questions associated with sources and causes of the problem.

Mr. **Boland**. Does indoor pollution differ very dramatically geographically?

Mr. **Ehreth**. We don't really know. We have had some TEAM studies.

Mr. **Boland**. What do the TEAM studies indicate?

Mr. **Ehreth**. They indicate there is a difference in total concentration, but that there is very little difference between industrialized or non-industrialized areas. There is generally a very good ratio between indoor and outdoor with indoor being generally higher, but we haven't identified what sources constitute that exposure.

Mr. **Boland**. I take it you would rely on TEAM studies really to determine the order of magnitude of pollutants, do you?

Mr. **Ehreth**. The ratio between indoor and outdoor, but TEAM is also total exposure. You are looking at drinking water pathways as well as air pathways. Our survey is focusing on air pathways.

We would be happy to discus that survey with you and talk about whether or not this is the right course of action with no problem at all.

Mr. **Boland**. The resources we have for indoor research are very dear and the criticisms of EPA's proposal for a national field study raise serious questions. We are not convinced that the benefits and the opportunity costs have received adequate evaluation.

Before putting our feet in concrete, I think we will wait for the CIAQ report. Will you provide for the record in the meantime a description of the resources in EPA's base program that directly support the indoor air research to give some perspective to the question of overall balance?

Would you also submit for the record summaries of all the specific project proposals that have been developed and considered by the CIAQ members, research on health studies, target exposure studies, sources and mitigation.

[The information follows:]

RESEARCH THAT SUPPORTS INDOOR AIR RESEARCH

The following tables summarize EPA fiscal year 1986 resources and projects which support the indoor air research program. Table 1 shows indoor air-related projects which are funded from the base research program. Table 2 indicates indoor air projects funded from the Indoor Air Add-on. Supplemental resources provided by Congress are used to augment research which cannot be covered by the base program activities. This approach is consistent with the January 20, 1984 Harvard Peer Review. The following tables provides information concerning the specific ORD office conducting the work, the title of each research project, and the current year funding level for each project:

TABLE 1: Indoor Air Research Projects Funded From the Base Research Program

OFFICE OF ENVIRONMENTAL ENGINEERING

TITLE	FY 1986 ($ in Thousands)
Evaluation of Performance of Indoor Air Particles Control Equipment	$50.0
Survey of Asbestos and Other Fibrous Particulate Matter Emissions in Residences	$50.0
Evaluation of Solid Sorbents for Organic Compounds in Indoor Air	$50.0
Test House for Indoor Source Characterization and Indoor Air Quality Control Assessment	$50.0
Multi-Chamber Testing of Sources of Organic Indoor Air Pollutants	$50.0
	$300.0

OFFICE OF HEALTH EFFECTS

TITLE	FY 1986 ($ in Thousands)
Indoor Air Health Effects	$150.0
US/People's Republic of China Cooperative Study of Lung Cancer in Xuan Wei, Peoples Republic of China	$200.0

	(FY 1986) ($ in Thousands)
Integrated Air Cancer Project	$551.8
Effects of Acute and Chronic Exposure to Ozone/NO_x	$1,466.3
Response of Normal/At-Risk Humans to O_3/NO_x Exposure	$1,474.2
Models to Assess Human Risks from O_3/NO_x	$590.8
Epidemiology Health Research on NO_2 and other Air Pollutants	$604.9
Characterization of Genotoxic Dose-Response Relationships from Hazardous Air Pollutants (HAPs)	$508.6
Determination of Neurotoxic Dose-Response Relationships from HAPs	$100.9
Determination of Pulmonary Dose-Response Relationships from HAPs	$434.2
Determination of Significance of Neurotoxic Response Indicators	$443.9
Evaluation of the Contribution of Source Emissions to Cancer Risk	$146.1
Identification and Evaluation of Toxic Components of Air Pollution	$330.0
Development of Methods to Identify Reproductive Toxicity of Air Pollutants	$276.1
Cardiac Response to CO of Normal and At-Risk Humans	$566.6
Validation and Extension of Coburn-Forster-Kane Equation	$118.7
Models to Assess Human Risks from Gases and Particles	$635.8
Physiologic Evaluation of Human Response to Pollutants	$129.1

	(FY 1986) ($ in Thousands)
Inhalation Effects of Gases and Particles in Animals	$2,164.2
Evaluation of Neurobehavioral Effects of Lead Exposure in Humans	$506.2
Response of Normal/At-Risk Humans to Gases and Particles	$4,810.5
Epidemiology Health Research on Particles and Other Pollutants	$1,074.0
	$17,282.9

OFFICE OF ACID DEPOSITION, ENVIRONMENTAL MONITORING, AND QUALITY ASSURANCE

TITLE	(FY 1986) ($ in Thousands)
Development of Models of Human Exposure to Air Pollutants	$200.0
Total Exposure Assessment Methodology (TEAM) Study in Baltimore, MD	$800.0
California-EPA Joint Human Exposure Field Study	$600.0
New Jersey Follow-Up TEAM Validation Study	$475.0
Kanawha Valley Methods Development Field Study	$50.0
Development of Guidelines for Measuring Human Exposure	$100.0
Development of Exposure Measurement Methods and Instrument	$250.0
Human Exposure Assessment Locations	$450.0
Dosage Research in Support of Field Studies	$525.0
Quality Assurance for Asbestos Monitoring	$160.0
Non-Occupational Pesticide Exposure Study (NOPES)	$400.0
	$4,010.0
TOTAL BASE	$21,592.9

TABLE 2: Indoor Air Research Projects Funded From the Indoor Air Add-On

OFFICE OF ENVIRONMENTAL ENGINNEERING

TITLE	(FY 1986) ($ in Thousands)
Emission testing procedures for material sources	$170.0
Support to emission testing procedures	$50.0
Analysis of kerosene heater organic emissions	$50.0
Development of indoor air source data base	$20.0
Characterization of indoor air particles for controllability	$50.0
	$340.0

OFFICE OF HEALTH RESEARCH

TITLE	(FY 1986) ($ in Thousands)
Bioassay of kerosene heater emissions	$50.0
Biological marker and bioassay exposure study in children	$100.0
Epidemiological and exposure study of respiratory symptoms and biological markers in children	$50.0
	$200.0

OFFICE OF ACID DEPOSITION, ENVIRONMENTAL MONITORING, AND QUALITY ASSURANCE

TITLE	(FY 1986) ($ in Thousands)
National Bureau of Standards modeling study	$100.0
Oak Ridge National Laboratory pilot field studies	$87.0
New York State radon pilot study overrun	$15.0
Multipollutant field survey	$1,192.0
	$1,394.0

TOTAL ADD-ON $1,934.0

PROJECT PROPOSALS DEVELOPED AND CONSIDERED BY THE CIAQ MEMBERS

In response to your request for research proposals, none of the Council on Indoor Air Quality (CIAQ) member agencies has produced research proposals for consideration by the entire CIAQ. However, EPA asked CIAQ members to provide their research project summaries which were compiled to produce a CIAQ Work Plan for distribution to CIAQ members. Attached is a copy of that Work Plan. Activities included in the Work Plan are those identified by CIAQ member agencies as indoor air quality research projects funded during FY 1985 and planned to be funded in FY 1986. This document attempts to categorize individual research projects by the CIAQ strategy tasks. Its purpose is to improve coordination on indoor air research among member agencies and to gauge how well the CIAQ strategy is being completed. This approach is being used to produce the Research Plan which should be available by the end of May, 1986.

In addition, EPA has provided research proposals to various CIAQ workgroups to obtain review and comment from other CIAQ member agencies and to improve coordination in the following research areas:

Radon - EPA has provided its radon strategy to the radon workgroup for review and comment. It is being implemented with support from other CIAQ member agencies.

National Multipollutant Field Survey - EPA's survey design team has produced a draft design of the national multipollutant field survey for review and comment by the CIAQ Field Studies Workgroup.

Health - EPA provided the CIAQ Field Studies Workgroup with six health study protocols for review and comment.

Source Characterization - EPA has sponsored an international symposium on procedures, measurements and data base development for assessing indoor air pollutant sources. The proceedings from this meeting are scheduled to be published soon.

RADIATION PROGRAM—NON-IONIZING

Mr. **Boland**. Thank you very much. Let's turn to radiation, which is reflected on R-2. That shows an increase in overall radiation program from $9.8 million in 1986 to $11.9 million in 1987. There are two important program changes. First, the radiation health effects research program is terminated formally in 1987. No funds were provided in 1986 for a non-ionizing health effects research.

What does the statement on R-11 mean, "a core staff is being maintained to phase out the program"?

Mr. **Ehreth**. What this does not reflect is a reprogramming action that we are in the middle of, in the process of implementing which will establish a FTE level of about 7.5 FTEs and a total of $700,000 worth of resources including salary and expenses.

That is what we mean by the core program. You will see that in the 1987 program, as well.

Mr. **Boland**. Has the decision to terminate that program been formally reached?

Mr. **Ehreth**. Well, it won't be terminated inasmuch as we will maintain that core of expertise.

RADON

Mr. **Boland**. The big increase in radiation is the radon program and the Administrator talked about that briefly today. That is reflected on R-20. The 1986 request is $6.6 million up from $4 million in 1986 and the justification indicates work is coordinated on radon between EPA and DOE.

Who is doing the health effect research?

Mr. **Ehreth**. I am sorry. I don't know.

Mr. **Potter**. I think we might have to augment our response for the record. But as I understand it, we are doing health effects research and DOE is involved in some of the research with regard to where radon sources are coming from.

It is a very complex, integrated research effort.

Mr. **Ehreth**. I understand the question now. DOE has a major epidemiology study in the radon area, the Redding Prong area, as a matter of fact. At least a $1 or $2 million dollars worth.

Mr. **Boland**. Then DOE is really doing the health effects survey.

Mr. **Ehreth**. We are also doing some health effects work, going to drinking water injunction route in the State of Maine.

Mr. **Boland**. One of the questions today indicated that the generally accepted standard is 0.02 working levels. How many homes exceeded that level?

Do you have any idea?

Mr. **Potter**. We are just beginning to get out and actually do the surveys. One of the problems we have is establishing protocols and guaranteeing quality assurance in order to actually make the measurements in the field. There are a number of devices available and we have to have comparability and quality of data before we actually begin making those assessments in the field.

The other part of it is that it is pretty clear we need to be able, when we go out with standards and measurement techniques to provide people with information on mitigation.

RADON EXPOSURE—LIFETIME RISK

Mr. **Boland**. Will you submit for the record a calculation of the lifetime risk assessment for people living in homes with radon exposures of 0.02 working levels?

Mr. **Potter**. Yes, sir.

[The information follows:]

Radon Risk Assessment

For the average exposed individual, the risk of fatal lung cancer due to lifetime exposure to a radon decay product concentration of 0.02 working level is estimated by EPA to be in the range of 13 in 1000 to 51 in 1000. EPA's calculations are based on assumptions that include an average lifetime of 73.7 years, indoor occupancy of 18 hours per day (i.e., 75 percent of an individual's day), and a range of relative risk coefficients recommended by EPA's Science Advisory Board.

The risk estimates provided above are subject to periodic revision as the result of improved knowledge and data on the risks from exposure to radiation, including radon decay products.

RADON MONITORING

Mr. **Boland**. Has all radon monitoring work been done by the States up to this point?

Mr. **Potter**. No, I don't think so. I think our primary ability to do it is in the West where we have had the problem with uranium mill tailings and phosphogypsum piles and things like that. So we have resources out there and we have this problem in Reading Prong which is back here.

This is one of the reasons that we pulled the States in to gain from their experience and also the Regional offices so we can understand who has the capability to respond to this problem. I might point out, Mr. Chairman, there are two parts to this radon program.

Most of the effort is dealing with mitigation quality assurance, and with assessments associated with the Reading Prong.

The second part of it is the national assessment effort which is going to be more long range, probably four or five years total. We will begin that next year. Then the second part of the national assessment approach is to try to provide information to avoid these problems in the future.

Mr. **Boland**. I presume that radon has its genesis in many products, has it not?

Mr. **Potter**. Well, it is part of the decay breakdown of uranium. So in any situation where you have uranium decomposing over time, it has a decomposition period of millions of years, you can have radon. There is a whole series of gases.

Radon happens to have the longest half life. Actually, the progeny have the longest half-life.

Mr. **Boland**. But are the gases generated by particular products, though, which are used in the home?

Mr. **Potter**. I am not so sure about that.

Mr. **Ehreth**. You can get radon exposure from building materials, for instance, cinder blocks and what not. Cinder block is fabricated from gravels and what not that maybe co-located closely to a high source of radium. Radon is a byproduct of radium and radon plus two daughter products that are the culprits here, and they attach themselves to tiny particles.

Those particles enter the lungs and that is what causes the incidence of cancer. So, yes, any time you are using soil materials for building materials, you will find the possibility, not always, but you will find the possibility of seeing radon levels.

Mr. **Boland**. What about products that are used in the home, that get into the ground? Is there a danger of radon seeping up through the ground as a result of that kind of pollution?

Mr. **Ehreth**. I wouldn't say that that necessarily is as a result. The biggest problem, as Mr. Thomas indicated this morning, is the fact that out-gassing occurs out of the soil. It is generally agreed upon out-gassing through the soil is probably a bigger source of the problem than through drinking water or whatever.

As drinking water comes from the tap, it is immediately volatized and out gassed. What happens in order to prevent it getting into the home, what you want to have is a slightly lower pressure outside your home underneath your basement floor there or under your walls so it out gasses into the outer atmosphere and is immediately diluted from quickly and the problem is significantly reduced.

Mr. **Boland**. This, I take it, is going to be a serious problem.

Mr. **Ehreth**. The risk estimate between 15,000, and as high as 20,000, cancers per year and, of course, that is what is causing Mr. Thomas to be so insistent on action.

Mr. **Barnes**. The State and territorial health officials have pegged this as the number one public health problem, after smoking at least in their judgment.

Mr. **Green**. I gather that our efforts to make buildings more energy efficient by sealing them up has compounded the problem.

Mr. **Ehreth**. That is right. As a matter of fact, opening your windows can cause a chimney effect and draw radon into the house even quicker. It is an educational process.

NATIONAL RADON SURVEY

Mr. **Boland**. If EPA conducts a national radon survey, I presume it could have several purposes. One approach would be to concentrate on and identify the hot spots. Another approach would be to try to determine average levels across the country.

Which way is EPA going with the national radon survey?

Mr. **Potter**. I am not sure that I know the answer to that question, Mr. Chairman.

I know there is concern both about geologic formations and hot spots. I don't know if there is emphasis in either direction, but perhaps we could answer that for the record.

Mr. **Ehreth**. I think I can help. Both of them are very good directions to go.

First of all, you identify whether or not you have more Redding Prong-like situations so you can apply some of our mitigation results we are applying over the past couple of years and this year through your assistance.

The second thing is that exposure is one of the areas again that is very weak in the risk assessment process, so it would allow us to more accurately quantify the degree of risk. So both approaches are very important.

Mr. **Boland**. For the record, would you detail for 1986 or 1987 what the radon funds are and the activities planned in each of those years.

[The information follows:]

Radon Funds and Activities

The radon resources for 1986 and 1987 for four major categories of activities are shown below:

[Dollar amounts in thousands]

	FY 1986		FY 1987	
	Work-years	Amount	Work-years	Amount
Health effects of radon exposure	1.0	$380	1.0	$300
Risk assessment or exposure assessment	9.5	1,170	8.0	750
Mitigation research, including demonstration projects	10.3	2,670	7.8	1,820
Other radon-related activities	1.0	230	5.0	250
Totals	21.8	$4,450	21.8	$3,120

RADON MITIGATION

Mr. **Boland**. My understanding is that EPA is taking the lead on radon mitigation techniques; is that correct?

Mr. **Ehreth**. Yes, sir. That is a fallout of the CIAQ, as a matter of fact. We have a work group on radon and people here at EPA are leading that effort.

Mr. **Boland**. Our understanding is that mitigation projects have had mixed results. Can radon levels be reduced in homes?

Mr. **Ehreth**. Yes, sir. We have demonstrated we can reduce them below the 0.02 level, but in doing that we have learned an awful lot about home construction.

Mr. **Boland**. At what cost?

Mr. **Ehreth**. Our target is less than $10,000. We are trying to see whether or not we can bring that down to about $2 thousand to $3 thousand per home.

Mr. **Boland**. Have the mitigation techniques become reliable enough for people to generally depend on in their homes?

Mr. **Ehreth**. The question is again?

Mr. **Boland**. Have the mitigation techniques been used, can you depend upon them?

Mr. **Ehreth**. With the additional numbers of homes we will be testing this year, what we expect to be able to get out of those results is additional reliability and confidence in those procedures and methodology.

Mr. **Boland**. Is there a potential here for those who are doing the work and trying to control it to take advantage of consumers—or maybe contractors who just don't understand the problem very well?

Mr. **Ehreth**. I suspect that is always a possibility. Our goal, of course, is as Lee said this morning, to get home owner guidance out as well as develop a detailed guidance manual for contractors and that universities can begin to use in terms of educational courses for contractors in different locales.

But there is some talk in some States actually of licensing contractors to do those sort of things. I don't know how far that has progressed.

Mr. **Boland**. Can it be said that radon mitigation techniques are reliable?

Mr. **Ehreth**. I think based on 18 homes we feel pretty confident that we have some information that we can transfer to other people and have it applied. We feel good about two or three techniques coupled with some sealing techniques.

The reliability will be enhanced after a few tests.

Mr. **Boland**. Let me ask whether the national survey might be premature? One of the reasons I ask is because I think back to what happened over asbestos. That created a bit of a panic in many areas of the United States and I am wondering whether or not we might be getting into the same situation here with radon.

Mr. **Barnes**. That, Mr. Chairman, was and remains a significant concern on our part. Once you tell people they have a problem, are you prepared to come in behind and tell people what the results mean, what they can do about it and that is why we have had the very intensive effort on the research of remediation.

I chaired a meeting a couple of weeks ago where we brought 21 States in from across the country to talk about their experiences. I think we are getting to the point where we will have the products on the shelf so that should a radon problem be developed in another State outside the project that we will have packages of training material that we can take into those States and have the people work with.

But to a degree like the State of Pennsylvania already has a program where they have 20,000 to 30,000 monitors now in homes. We are already into that potential problem you describe.

New Jersey is right behind them and New York only slightly behind that. We have got to have these products ready anyway.

Mr. **Boland**. Is there any necessity for providing more information to validate successful mitigation procedures?

Mr. **Ehreth**. We have some resources in our 1987 budget to extend these studies and complete these studies and not only through the Redding Prong area. This will give us an opportunity to evaluate these things in the western States perhaps in Butte or someplace in the West, as well as perhaps Florida.

The sites have not been specifically identified yet. Those are just some that have come to us and talked about moving into those areas.

Mr. **Barnes**. We do have concern about making sure we have looked at the construction techniques and so on that widely vary across the country and make sure what we are suggesting to people works in other situations.

Another dimension of it is I think watching these fixes over time. I mean, sealants can have a tendency to crack or deteriorate and so I think we have got to watch that the methodology we develop works not only in year one, but in year five and ten and so on.

Mr. **Ehreth**. Sealing and caulking compounds are some of the first compounds we are looking at in our indoor air work and they also emit pollutants. You never do one thing in this business.

TOXIC SUBSTANCES—ASBESTOS

Mr. **Boland**. Thank you very much.

We will turn to toxics. The toxics program drops from $137.2 million in 1986 to $89.5 million in 1987 principally because no funds are requested for the asbestos in schools loan and grant program.

Jack, why weren't funds requested for that program?

Mr. **Moore**. It has been and remains the Administration's position that it is not necessarily the Federal Government's responsibility to pay for the removal of asbestos found in buildings. We do think we need to maintain a strong program as far as the outreach and transfer of knowledge down to the local level and that is why we have built into the budget $3.5 million for technical assistance and outreach.

ASBESTOS ABATEMENT—ASHAA FUNDED

Mr. **Boland**. Last year you selected 340 school districts for funding under the first $50 million. Do you have any idea how many actually completed the asbestos work last summer?

Mr. **Moore**. I can provide the exact number for the record, but our expectation was that we would have a lot of it done last summer. That is why we strove very hard to meet that June award date. Our experience has been that because of the lag associated with school district contracting, the majority of the work basically is going to be undertaken this summer with the money that was awarded last summer.

[The information follows:]

School Asbestos Work Completions

We cannot tell exactly how many projects were completed in the summer of 1985. However, we do know that 33 of the 198 education agencies (LEAs) that received funds completed the work between the time they submitted their applications and January 1, 1986. Another 105 LEAs will perform their abatement projects during the summer of 1986. The award agreement allows LEAs two full years to perform the abatement work (until June 6, 1987). Forty-seven LEAs contained projects which were already completed at the time they submitted their application, for which EPA is reimburseing them. The balance of the LEAs have either requested time extensions to resolve local issues before accepting their awards or have rejected our offers.

Mr. **Boland**. I would think that the amount of money provided to local schools and local areas would not have been sufficient to complete the work that had to be done.

The amount of dollars did not cover the job in the schools required to to get rid of the problem.

Mr. **Moore**. We had many more applications in our highest category of concern than we were able to fund.

Mr. **Boland**. Any idea what that dollar figure of the requests was?

Mr. **Moore**. The 1985 applications for abatement of severe asbestos hazards in financially needy schools, totalled about $200 million, of which we funded $45 million.

Mr. **Boland.** Would you provide for the record, Jack, the outlays to date for school loans and grants exclusive of administrative costs?

Mr. **Moore.** Yes, sir.

[The information follows:]

Asbestos-in-Schools Program

Outlays for the Asbestos School Loans and Grants program through February 28, 1986 are $7,879,635. After the summer of 1986 we forsee a significant increase in outlays.

Mr. **Boland.** When considering funds for any programs that the agencies request, I think it is essential we have some idea how the programs are really operating to determine whether or not the programs are successful and whether or not the problems have been met. EPA doesn't have much of a track record in this area, do you?

Mr. **Moore.** No, not as far as being able to measure whether or not we truly corrected the problem that you were setting about to try to control. Through air monitoring studies we hope to come up with some objective statistics that may bear on the issue as to how well an abatement program in a given school reduced the levels of asbestos in a particular room within the building, as well as what effects it might have had elsewhere in the building.

QUALITY OF ASBESTOS ABATEMENT

Mr. **Boland.** Do you have any idea on the quality of the work that was done when these grants or loans were made?

Mr. **Moore.** If you set aside the money that we put out for ASHAA loans and grants, I think there are enough anecdotes that show the quality of work that was done in removing asbestos in the school buildings has varied. It ranged widely from a superb job to work that probably created a problem bigger than the one they were trying to solve.

What we have committed to do for abatement work conducted with ASHAA grant and loan fund is conduct an onsite inspection program to help assure that the abatement work is appropriate for the problem and done correctly.

Mr. **Boland.** How often do you do it? How do you monitor this particular program? Does EPA inspect each federally funded school?

Mr. **Moore.** Last year we inspected, prior to award, sites for those applications that appeared at first glance to be in the zone of consideration for award to verify the hazard and to assure that the proposed abatement method was appropriate. We also have committed as a condition of award that we will inspect during the abatement project. We also require an inspection before the Agency makes final payment to verify you have cleaned up that which you set out to do.

Mr. **Boland.** So, EPA has actually done inspections of work that has been in progress?

Mr. **Moore.** Yes. The only exception to the ones we have not inspected are those projects that are so small they started and completed before we get there.

Mr. **Boland**. Can you give us the total number of projects that were funded, both grants and loans?

Mr. **Moore**. 417 projects in 340 schools.

Mr. **Boland**. How many inspectors actually were following the progress of this program?

Mr. **Moore**. We have probably somewhere around 70 or 80 people in the regions that could have done it. On the other hand, what we have also——

Mr. **Boland**. How many?

Mr. **Moore**. Seventy or eighty.

On the other hand, we have seen the regions using some of the people under the air monitoring program to do some of the monitoring because of the NESHAP's requirements.

Mr. **Potter**. Mr. Chairman, one of the things we have done in our grant program, as part of a performance improvement program which the administrator has supported and urged us to do is to engage in an asbestos component here to try to put our contractors in the field in better position to deliver products. That is part of this shift in emphasis that we were talking about earlier on State grants.

LIABILITY INSURANCE

Mr. **Boland**. Last year we discussed the problem of insurance, liability insurance, and as I remember, a lot of the contracts were not able to get it. Is that still a problem and is there a requirement that schools use insured contractors?

Mr. **Moore**. Most schools have some type of requirement. In order for a contractor to get a bond he has to have some type of insurance so they get caught up in it somewhat. To my knowledge, the liability issue still remains as great as it was a year ago. People are able to get insurance, but what they are getting is less coverage. They are being insured for claims made only while the policy is in effect and they are having to pay horrendous fees—up to twenty percent of a contractor's gross receipts.

Mr. **Thomas**. Mr. Chairman, the liability insurance issue is a broad problem across our programs. It is a major problem in the hazardous waste area. In asbestos we have seen that it is a major problem.

The projects have been able to continue but it is a major problem.

CONTRACTOR CERTIFICATION REQUIREMENT

Mr. **Boland**. We provided $50 million in 1985 and provided another $50 million in 1986. And because of our concern over sloppy abatement work being done, we included a requirement for contractor training and certification in 1986.

Has that been useful or carried out at all?

Mr. **Moore**. It has been useful. The requirement does not hit home until we announce the awards from the applications we are in the process of collecting and reviewing right now, but it has proven to be useful as a very tangible stimulus to a variety of States to try to get a contractor certification program in place.

We have a very great interest, for example, in our one-time appropriation of grants to be the seed money for the certification and training programs. I believe there were in December last year only four States that had a program.

We were up to 12 by the end of fiscal year 1985. We will be at 27 by the end of 1986 and up to 35 States through the end of 1987. We are not pushing the money. There are people beating on the door saying we want to compete for those grants.

The interest is clearly there.

Mr. **Boland**. Has EPA disapproved any State certification programs?

Mr. **Moore**. Not as of this moment.

Mr. **Boland**. I notice in the papers that asbestos contractors indicate that they have completed a training program. I have seen that in a number of areas.

I think generally speaking you have made some fine progress on training programs and State certification. Our concern is that the training courses and State certifications implicitly give contractors a stamp of approval. And, of course, I think ordinarily the local people would get that impression, too.

How do you determine whether or not a contractor will do a good job? How do you actually make that determination?

Mr. **Moore**. Obviously, one's hope is that through exposure to a correct training program they will assimilate the information that we think is essential to do the job right.

But having sat through the course doesn't always translate into perfect performance in the field. This is why I think it is important that there be at least a threat if not an actual presence of somebody from the State or Federal Government during the abatement which is just a further stimulus for compliance on the part of the contractor who hopefully does know how to do it right.

Mr. **Boland**. As I say, that presents a problem whether the contractor is breezing through the course and getting a certification just so he looks like he can do the job—and relying on that certification. I guess being certified is an act of faith that the communities have in the contractor.

I think this program requires some good oversight. I hope you are giving it to it.

Mr. **Moore**. As you pointed out, the requirement for this year's money, to be accepted by the school district, is they must contract with certified contractor. We intend even with that in place to still visit these sites during abatement work.

When work with this year's money has been completed, we might have some statistics that give us a sense as to whether there is any material improvement in job performance as a function of having been certified as opposed to not having been certified.

Mr. **Thomas**. We have set up a formal evaluation of that component of the program to evaluate the effectiveness of the certification and training on contractors' performance. It is tied into Jack's program this year as a part of our performance improvement projects.

Mr. **Boland**. Do you have any indication of how many contractors' certificates have been revoked?

Mr. **Moore**. No.

Mr. Boland. Now, the States, as I understand it, do most of the inspections. They have inspection staffs, I take it. Do those particular staffs have the required technical expertise to determine whether or not the job being done by the certified contractor is being done in the manner which it ought to be done.

Mr. Moore. I think you would have to go to the States to get a better track record as to whether or not they have had good success over the years. Maryland, for example, has had a program in place for several years so they probably have a greater perspective of experience over time than you would find in a lot of other States.

There are also lots of other States that might approve that. Many of the other States have just entered into the realities of trying to set up some type of contractor certification program and don't have a track record of several years to be able to gage performance.

ASBESTOS ABATEMENT—INSPECTOR TRAINING

Mr. Boland. Do you use any funds to actually train inspectors?

Mr. Moore. I don't recall we have any project that I would call to train inspectors. Some of the courses we have, like the Tufts pilot center, the Georgia Tech pilot center or the Kansas pilot center, would certainly prove to be of value to an inspector.

We also conduct training courses for our EPA employees who serve sort of inspection.

Mr. Boland. Would it be a good idea to refocus some of the training centers to local inspectors. You are increasing, as I understand it, the training sites from three to five.

Mr. Moore. Yes. We have also announced California, Berkeley and the University of Illinois.

Mr. Boland. I take it it is the plan of the EPA to make these centers self-sufficient in a couple of years?

Mr. Moore. Yes. As a condition of award, we have promised them funding for a period of three years, after which period of time we expect them to be somewhat self-sufficient.

Our experience with Kansas, which has been very aggressive in marketing its program, is that it is having no trouble realizing self-sufficiency.

COMPLETED ASHAA PROJECTS

Mr. Boland. With respect to the $50 million provided in 1986 appropriation bill, how many projects will be completed using that money this summer?

Mr. Moore. My guess, based on the experience we had from the 1985 money, is the majority of the 1986 money would not be used for jobs completed during the summer break, but would end up funding jobs to be performed really in 1987. There tends to be a year lag.

Our award date this year will slip compared to last year, which would even compress the situation further.

Mr. Boland. So there will be a delay, as I understand it, as a result of it?

Mr. **Moore**. By the time the school systems meet their competitive bidding requirements they basically have lost that summer. They might be able to schedule work during the Christmas break or something like that.

FINANCIAL ASSISTANCE APPLICATION

Mr. **Boland**. Did you have some problem getting the application out? This bill, both the House and the Senate versions, contained the $50 million. I presume you had applications out within a short period of time?

Mr. **Moore**. No. Our application went out the last two weeks in February. We were late in getting it out. We did revise the form to make it a simpler form and we had to get that form approved. We do have to have approval of any form. We also did a lot of soul searching. We received some 8,500 applications last year and ended up funding some only 417 of them.

We questioned whether or not we wanted to continue to get that many applications if we are going to fund roughly a few hundred. We tried to work out a mechanism whereby we could be very candid based on our first year's experience, with the school districts to let them know what were going to be the criteria that would likely make them successful in the award.

Mr. **Boland**. Some people were concerned the initiation of a Federal grant program would lead schools to stop doing abatement while they wait for Federal subsidies. Did you run into that problem?

Mr. **Moore**. That is always a constant concern. The law itself does make projects that have been completed before January 1, 1984 eligible if they can demonstrate the financial need and hazard. Some people argue if they found the resources to complete the project they would compete less favorably than one who has not done the project.

But we did fund some significant percent of completed projects using the fiscal year 1985 money. That track record might serve to stimulate people to continue to go forward and abate their serious problems rather than wait and see if money becomes available.

Mr. **Boland**. Do you know how many States actually moved ahead on their own?

I know New Jersey was probably one of the first ones to do it and that resulted in a bit of a problem. They couldn't open a number of the schools because the removal was done badly and they came in for a lot of criticism. Those contractors who were doing it frankly, didn't know how to do it to begin with. Are a number of States now doing it on their own without Federal assistance?

Mr. **Moore**. Virginia last year wrote us and declined to participate in the loan and grant program saying that they had a mechanism within the State that would allow them to achieve their funding. I notice with a change in administration we received a letter just this last week announcing they would elect to participate in the project this year.

ABATEMENT SPECIFICATIONS

Mr. **Boland**. I understand you have been working with the National Institute of Building Sciences to develop some specifications to help contractors do good work in this area. Have they been useful to you?

Mr. **Moore**. Yes, Mr. Chairman EPA staff participated in an effort to try to come up with specifications that could be used in putting out bids. That is an example, I think, of a grass roots effort that really pays off because that could become the boilerplate school districts use with some degree of assurance.

We think the effort was very worthwhile. We are a little bit frustrated that the effort has yet to be printed so the ultimate value is trying to get it in the hands of the school district still remains to be realized.

ASBESTOS LEGISLATION

Mr. **Boland**. Do you have any opinion on the Florio bill that is now pending vis-a-vis asbestos?

Mr. **Moore**. The goals in general I think are laudable. We certainly have some problems in the resources that it might take to realize it. We also have some problems in some of the enforcement and compliance aspects of it whereby we have an inability to enforce or to stimulate compliance.

We are in the process of finishing up our formal analysis of that bill.

Mr. **Boland**. Have you analyzed at all the work load implications of the bill?

Mr. **Moore**. Yes. I am getting briefed Friday as to what that is and then we will move it up to the Administrator.

Mr. **Boland**. Do you support the bill? I will ask the Administrator.

Mr. **Thomas**. We are not in a position yet to have taken a formal position on it.

Mr. **Boland**. I take it it is the position of this Administration or probably the EPA itself this is a matter that ought to be resolved locally.

Mr. **Thomas**. I think there is a proper role for asbestos abatement at a Federal and State level. For instance, in our 1987 budget the request was not for additional grant money, but it was a request for the certification and training program that we put in place, the technical assistance program.

I think there is a proper leadership role that the Federal Government should take, a standard setting that we have done. But we don't think that the financial assistance role is a proper Federal role.

ASBESTOS RISK ASSESSMENT

Mr. **Boland**. For several years this Committee has questioned EPA's approach to asbestos regulations. specifically the assumption that all fiber types present the same risk. Uncertainty over this issue was raised by British and Canadian studies and last year by the National Academy studies.

Last year you agreed to take a fresh, objective look at the scientific basis. Has that been done?

Mr. **Thomas**. I am going to ask Jack to respond to that in more detail, but I can say after last year's hearings I personally did ask the staff to come in and give me a full briefing on the blue and white asbestos issue which is basically what the issue was and reached a conclusion and actually it was embodied in regulations that we have proposed for banning asbestos that there were major health risks from both.

Jack?

Mr. **Moore**. We interpreted that the "fresh look" part of the request was that the people who had become so involved in the risk assessments, the Office of Pesticides and Toxic Substances, probably should step back and let somebody else take a look and see if they come up with the same general conclusion.

ORD in response to a risk assessment requirement for the Office of Air and Radiation did an update of the risk associated with asbestos use. It was assigned to the Science Advisory Board and got endorsement.

To paraphrase, ORD's assessment basically came out in generally the same place as the OPTS efforts and a number of other efforts. As far as asbestos types, the issue is there is some data that suggests that indeed chrysotile may pose less of a certain type of cancer risk than do other forms, but it is a matter of degree.

It is not no risk versus risk. The difference in risk that scientists tend to be agreeing upon is that chrysotile may cause fewer tumors in the lining of the stomach area of the body.

It does not suggest there is any difference in the level of risk of mesothelioma of the chest cavity or lung cancer and those are the two major tumor types concerned with asbestos.

FIBER DIFFERENTIATION

Mr. **Boland**. This Committee and later the National Academy called for a number of studies to address the uncertainty over differentiation risks and substitutes. I don't know whether any results have been obtained from those studies.

Will you submit for the record an update on the progress of each of those studies?

Mr. **Moore**. Yes, sir.

[The information follows:]

PROGRESS ON DIFFERENTIATION OF RISKS OF ASBESTOS TYPES

The Office of Air and Radiation, through the Office of Research and Development, has recently produced an asbestos health assessment. The report was reviewed by the Science Advisory Board. In addition, it was widely reviewed by health experts. These included Sir Richard Doll and Julian Peto of Great Britain as well as Dr. Corbett McDonald of Canada. The conclusions of the update are in line with what we have been using as the basis for our asbestos control program.

A three-year epidemology study funded by EPA has been started by the Mount Sinai Medical Center. The study will focus on school teachers exposed to low levels of predominantly chrysotile asbestos. The primary aim of this research will be to demonstrate the presence or absence of asbestos-related X-ray abnormalties in a group of 1200 female school teachers who were employed in schools with asbestos surfacing material, beginning 20 or more years previously. (Statistically, the absence of an effect will be expressed as an upper limit on the difference in the prevalance of X-ray abnormalities among exposed and unexposed teachers.) The prevalance of X-ray abnormalties will be compared with that of 600 teachers not exposed to asbestos in schools and correlated with subjective assessments of asbestos exposure, based upon the type of conditions of those materials. The results of the prevalance of X-ray abnormalities will allow risk comparisons to be made with other groups of women exposed to asbestos in environmental circumstances (home contacts) for which data on the prevalance of asbestosrelated X-ray abnormalities have been obtained and for which mortality data are unavailable.

EPA also has experimental work underway in our facility at Research Triangle Park, North Carolina. This work is designed to investigated dose response relationships of various fibers, including asbestos types as well as substitutes.

PROGRESS ON EVALUATING HAZARD SUBSTITUTES

Last April, the Office of Toxic Substances completed a review of the hazard potential of the major asbestos substitutes. The major conclusion of this review is that none of the currently used major asbestos substitutes present a health hazard of similar magnitude to that presented by asbestos. Other findings are as follows.

The potential for risk from the use of fibrous materials as asbestos substitutes is not as great as the magnitude of human risk known to exist for asbestos. The potential hazards from the substitutes are a result of their intrinsic toxicity and respirability. An overview of the hazards of the substitutes is presented below:

- Fibrous glass appears to be less hazardous than asbestos based on (1) morbidity and mortality studies in workers, (2) in vivo and in vitro experimental data, (3) an order of magnitude lower exposure potential in the workplace and the generally less respirable nature of the airborne fibers, and (4) the less durable nature of the fibers in vivo (lungs). It is not anticipated that exposure levels would be any higher in the manufacture of fibrous glass in the future.
- Mineral wool does not appear to present the significant risks that asbestos does based on (1) limited animal data and morbidity and mortality studies in workers, and (2) generally lower exposure in the workplace.
- Ceramic fibers do not appear to present a comparable risk to asbestos based primarily on (1) low production volume, (2) moderate workplace concentrations, and (3) specialized applications which include its encapsulation and/or incorporation into products.
- Carbon/graphite fibers are probably not a significant health risk based on (1) limited applications, (2) use of coatings on the fibers which may reduce their respirability, (3) low production volume, and (4) low intrinsic respirability characteristics.

- Aramid fibers appear to have low biological activity and to be basically nonrespirable as currently produced and processed. EPA has recently received a Section 8(e) report with preliminary results of a two-year inhalation study on specifically processed fibrils of poly p-phenylene terephthalamide aramid fibers. A low incidence of lung tumors was observed at the two highest does (100 and 400 fibrils/cc of air). It should be noted that it is unlikely that these specially processed fibers will be encountered in the normal use of aramid fibers in products and that the doses utilized in the study would be expected to result in an overwhelming of the normal pulmonary clearance mechanisms in the lungs.

- Polyetheylene and Polypropylene pulps and fibers appear relatively nontoxic and nonrespirable.

- Attapulgate may present a potential risk based on its (1) general exposure potential, (2) high production volume, and (3) respirability characteristics, which may exceed those for asbestos. Some limited toxicology data on some long species of polygorskite and structural-activity considerations suggest some potential toxicity. This substance is not a major substitute for asbestos, but exposures in other uses may be significant.

The Office of Toxic Substances (OTS) is continuing efforts to locate and evaluate studies on substitutes. OTS is also finding out what research is underway. For example, the Thermal Insulation Manufacturers' Association is sponsoring a major animal study on fiberglass, mineral wool, and ceramic fibers. In additional, other parties are conducting animal studies on attapulgite, aramid fibers, wollastonite, carbon fibers, and erionite.

OTS is evaluating the need for additional studies, but, thus far, preliminary results do not indicate any major change from the findings of our review of last April (discussed above).

ASBESTOS BAN

Mr. Boland. In January EPA went ahead with its regulation banning asbestos. That became a political issue which symbolized the struggle between EPA and OMB. We respect your decision.

We are still puzzled, however, that the regulation applied to all asbestos fibers uniformly. Didn't the objective evaluation EPA undertook last year make you aware of the substantial evidence that different asbestos fibers have different risks?

Even Dr. Goldstein acknowledged in last year's hearings that there were different degrees of risk for these fibers. Why then are they being regulated alike?

Mr. Thomas. Mr. Chairman, I think the acknowledgment of the different degrees of risk from the fibers did not detract from the overall risk that all types of asbestos present to public health from mesothelioma, and lung cancer.

The regulation that we proposed was based on that risk assessment and the really pervasive nature of asbestos is the difficult problem we had all the way from mining through milling to manufacturing to installation to disposal. Whatever type of fiber it was, we ran into a problem with the risk posed to public health from either type fiber, particularly the lung cancer risk.

Mr. Ehreth. I would agree with Lee wholeheartedly that implantation and injection studies show the shape of the fiber not its chemistry is the most important factor. However you can rank fibers by their degree of carcinogenicity, but all of them, all of them demonstrate carcinogenicity.

That is pretty much what Dr. Goldstein was saying, too.

Mr. Green. Again, referring to the regulations which appeared on January 29 in the Federal Register, I gather the ambient concentration of asbestos they would permit is far below the new OSHA permissible exposures level; that raises the question, are you too low or are they too high?

Mr. Thomas. There are two different approaches, but they go together. The OSHA is looking at the work place standard for control standard for work.

We were looking at the overall environment. OSHA's is a short-term standard. Ours we feel will reduce the total risk posed by asbestos and is the approach necessary is eliminate asbestos from use in our environment, by eliminating the mining of it, the milling, the manufacture, the installation, and the disposal of asbestos.

We looked at the residual risk after OSHA implements their regulations. Their regulation would immediately deal with the work place exposure problem.

But we feel, even with that, you have a residual risk both in the work place and out of the work place that warrants regulatory action beyond what OSHA is doing and we coordinated on these actions.

The only way we could find to deal with that residual risk is ultimately to eliminate asbestos and that is why we proposed a ban.

HEALTH RISK—SMOKERS VERSUS NON-SMOKERS

Mr. Green. I understand that the risk of cancer from asbestos exposure is much higher for smokers than non-smokers. Are we in essence putting an unnecessarily high cost on the non-smoking public in order to deal with the problem of the smoking public?

Mr. **Moore**. I don't remember the figures, but it is certainly true that the combination of asbestos exposure plus smoking is probably the best example we have of the synergistic effects of two different exposures.

However, there is quite clear evidence that non-smokers are at risk of either lung cancer or mesothelioma through asbestos. If we eliminated smoking from our population, the incidence of lung cancer as a consequence of exposure to asbestos would go down because of the lack of synergy and, therefore, the other type of tumor associated with asbestos, with asbestos mesothelioma would then become more dominant of the tumor type.

There is no interaction of mesothelioma cancer whether you are a smoker or not.

Mr. **Green**. Would the mesothelioma be enough in and of itself to cause you to ban asbestos?

Mr. **Moore**. The Academy study predicted, as I recall, that the greater risk of a female non-smoker over her life span and I think male as well would be primarily from mesothelioma as opposed to lung cancer.

Mr. **Green**. If you were simply facing that risk in a non-smoking population, would you have reached the same conclusion with the substance being banned?

Mr. **Moore**. Yes, very heavily—we didn't do it that way. We did that plus the lung cancer of a non-smoker.

ASBESTOS SUBSTITUTES

Mr. **Green**. One last question in this area. I understand fiberglass appears to be significantly less dangerous than asbestos apparently because of the ability to control the size, but that it may not be adequate to replace asbestos in such things as truck brakes.

Could you comment on that?

Mr. **Moore**. You are correct. Exposure to fiberglass is clearly posing much less of a health risk than is exposure to asbestos. It is not of a fiber quality that would compete in brake products. There are other synthetic fibers that people are hopeful will successfully compete with asbestos in, for example, brakes.

Mr. **Thomas**. We saw that regulation as a technology forcing regulation. That is why certain products were not banned today but would be banned over time to allow the development of substitutes that were more acceptable than asbestos.

So it is a technology forcing regulation.

Mr. **Green**. Thank you, Mr. Chairman.

PESTICIDES PROGRAM

Mr. **Boland**. We will turn to pesticides. This is one of the areas which is increased in 1987, up 3.9 percent from $66.8 to $69.4 million, with work years down a couple of work years.

Lately toxics, and especially air toxics, have occupied or attracted most of the publicity. Things have been relatively quiet in the pesticide area since the EDB excitement in 1984.

What is your judgment in terms of the overall cancer load we are exposed to? Are the risks from pesticides often overlooked and understated?

Mr. **Moore**. I think that is the concern on the part of a significant segment of our population, particularly as it relates to "old" pesticides. We don't have the data on hand to be able to answer the question you just posed with any degree of certainty.

So the speculation is that because pesticides by their nature are biologically active compounds, when the test data comes in one would find a health risk greater than one would have predicted absent the data.

I suspect in the final analysis when the data is in we will find indeed there are some pesticides, once you have the data in, that we will move to eliminate their use in our society. We have done that with some of the grain fumigants, for example, of EDB.

CHEMICAL REVIEWS

Mr. **Boland**. I think a fundamental problem with FIFRA is while new substances are carefully evaluated before registration, existing chemicals remain in use until proven guilty. Then why does the number of old-chemical reviews reflected on page P-6 decrease from 5,200 to 4,650?

Mr. **Moore**. Part of that is reflecting the actual number of things that are coming in. If you look at the 1985 actual in that same column, it is 4,209, reflecting what we are doing so we basically are correcting the numbers to more accurately reflect that which is coming in.

That number basically also is related to what we often call "me, too" pesticides. That is something on the market and somebody else wants to sell the same thing under the agreement. It does not reflect necessarily this deep scrutiny of the data base that underpins the safety, or lack thereof, of pesticides.

DATA CALL-INS

Mr. **Boland**. And have data call-ins now been made for all 600 active ingredients?

The testimony last year indicated that this would be completed by the end of 1985.

Mr. **Moore**. Mr. Chairman, I believe our statement was that data call-ins for food use pesticides would be completed by the end of 1985 and that indeed was realized.

The data call-in for the health and safety data, takes a tremendous lead time to produce, some of these cancer studies, for example, take 52 months from the time we demand it until we have finished those data call-ins.

The practical implication of that is, one, you obviously have the studies underway; secondly, for those studies, registrants, who planned to provide such data, when they failed to commit, we suspend their product.

REGISTRATION STANDARDS

Mr. **Boland**. The bottom of page six shows that 117 registration standards were completed by 1985 with 25 more coming in 1986, and again another 25 in 1987.

If you are doing 25 a year, does that mean it is going to take you to the year 2000 to work through the 500 or 600 active ingredients?

Mr. **Moore**. Yes, sir.

Mr. **Boland**. Are those 117 registration standards preliminary or final standards?

Mr. **Moore**. I would say that the ones that we are doing are, in 1986 and even more so in 1987, close to being a final standard.

The ones done in early, 1981 or 1982, have to be revisited. The reason for that is the standard basically comes up with a statement of what data are in the file matched against that which was demanded by our regulations, then also, an analysis of that data in the file.

Some of the early registration standards discovered data gaps or data that are not up to current standards, so we have put out a requirement to provide such data.

When that data comes in we will have to revisit those early standards. The ones we have now, I would say all major aspects are essentially complete. We have the full data base.

SPECIAL REVIEWS

Mr. **Boland**. Is it true that 20 to 25 percent of these studies raise sufficient questions to trigger special reviews?

Mr. **Moore**. Yes, sir. It is right around 20 percent, give or take.

Mr. **Boland**. On the top of the page we see special review decisions, 13 in 1986, and in 1987—the very top line.

Those figures as I understand, are for decisions.

How many reviews are being started each year?

Mr. **Moore**. As I remember, it is somewhere around five to seven per year, based on the last two or three years, which reflects this 20 percent we were just talking about.

Mr. **Boland**. Do you have a backlog of cases of waiting for special reviews?

Mr. **Moore**. No. If there has been a frustration within the program and also for people who watch the program it is once something gets triggered into special review, the length of time it takes to bring that to final closure. In some of the older cases—EDB, a good example, took six or seven years, and we find that totally unacceptable.

Our experience is going to be, I think, much better, because——

Mr. **Boland**. How much better?

Mr. **Moore**. I can give you an example. We do these registration standards, and we have a full data set. We have the data we need to propose the informed decision if you want to modify it in a given pesticide.

So, I think we are starting to enter an era where rather than just announce it, going in with a statement of concern, we are now accelerating that process; but whereby, in a decision to stating the level of concern, we are also identifying the proposed solution to fix it.

So, we basically are combining two steps into one right now. The last chemical we put in Special Review, we basically identified what the concern was and also identified how we propose to fix it.

I would hope we would be done with that within one year as opposed to three to five years, historically. I hope that would become the pattern.

MARKETPLACE INVESTIGATIONS

Mr. **Boland**. What are marketplace investigations? Why are they being decreased so substantially?

Mr. **Moore**. Marketplace investigations reflect the investigations that are done at a State level. You will recall that the pesticide program is, essentially, fully delegated for enforcement and compliance.

These represent the number of investigations that are done by a State official in the marketplace where the pesticide is sold. It could range from a K Mart garden to a farm supply store.

The decrease in the numbers reflects a decrease in the budget that is going to the State for that area in 1987, roughly $500,000.

EMERGENCY USE INSPECTIONS

Mr. **Boland**. Section 18 and 24 reviews for emergency and special use exemptions are reflected as being down on page P-6 in 1986 and 1987, way down.

What do you attribute these reductions in State requests to—Is it that EPA is now taking a harder line?

Mr. **Moore**. We would call that a success story, Mr. Chairman. There was a strong cry of abuse of this part of the statute back in 1981 and, 1982. We now have come up with a more rigorous set of guidelines. We negotiated with all parties of interest and came out with a negotiated rulemaking this year.

It is now clearly understood what the agencies will look at as a legitimate section 18 type request. Once that has become known, the States have become more proficient in sending in legitimate requests. As a result, the number of issues that come in have dropped precipitously.

BIOTECHNOLOGY

Mr. **Boland**. On P-17 the biggest increase in pesticides is reflected in biotechnology-related research. Dollars go from $4.9 million in 1985 to $5.9 million in 1987.

What is the thrust of EPA research into genetically engineered organisms?

Mr. **Ehreth**. We are working less on dispersal, survival, and health, and ecological effects, and focusing primarily on the environmental side.

This overall program sees about a $2 million growth in 1987.

Mr. **Boland**. And do you anticipate substantial additional resource requirements in the next few years in this activity?

Mr. **Ehreth**. I suspect it will have a lot to do with the amount of business Jack sees in his shop in terms of applications and the nature of that.

We had difficulty in our first year in the effects area, just obtaining good studies. We went to—I mentioned yesterday—we went the more competitive route, and we have about 225 studies which we have funds for research.

Mr. **Moore**. I doubt if it will go down. My sense is there will be pressure for it to go up. It certainly won't go down.

GROUNDWATER SURVEY

Mr. **Boland**. How much of the pesticide research is going to the National Pesticide Ground Water Survey?

Mr. **Moore**. Resources allocated for the Natural Groundwater Survey totalled $750,000 in 1985; $1,900,000 is planned for 1986, and $770,000 for 1987.

There will be a drive to see if we can make that 1987 figure go up a little more.

NEW CHEMICAL REVIEWS

Mr. **Boland**. On the top of P-23, there is an indication that the funding increases are for additional work on new chemical and new uses to register safe chemicals.

If that is true, why is there no increase in outputs which are reflected on page six. New reviews are unchanged at 330 each year.

Mr. **Moore**. The reason that we are not looking for increases in manpower or anything in that area is we think we have refined the efficiency of the process such that we basically are able to put things through with the same or decreased amount of manpower.

REGISTRATION FEES

Mr. **Boland**. In the middle of the page, again, that reflects EPA's desire to institute registration fees in 1987. That was originally proposed in 1985, then again in 1986, and no action was ever taken. What is the holdup there?

Mr. **Moore**. Mr. Chairman, we have a notice of proposed rule making that is in the very final stages of development within the agency.

We have held it up for short additional periods of time until the task force that the Administrator has put together has a chance to take a holistic viewpoint on where the agency will go on user fees.

That rule making is proposing that we recover fees for the registration of pesticides. There is a legitimate question as to whether we should broaden that and try to cover the cost of re-registration of pesticides rather than just focus on registration of pesticides.

Mr. **Thomas**. Congressman, we have taken the whole issue of user fees such as these registration fees. We have a group in the agency now working on it, including State participants.

It is extremely important in some of our programs what we do with the proposal on fees as opposed to what States do with the proposal on fees.

We are looking over the next couple months at what could be done and what would be proposed there. We are planning in concert with what we would do in all our specific areas.

Mr. Boland. Last year the indication was that these fees were to be returned to the general fund. Why don't you create a revolving fund and use those fees to increase special reviews and active ingredient reviews?

Mr. Thomas. We have looked at the idea of creating a revolving fund. As a matter of fact, the agreement we have with OMB this year is, as we move forward and look at the issue of fees, it would be done in the context of fees that would provide revenue into a fund that would be available for the agency.

That was a major issue, from my point of view, in discussions with OMB this year over fees, and they have agreed with our approach on it.

EDB INDEMNIFICATION

Mr. Boland. It would seem to me that a revolving fund would certainly accelerate the program. We deal with revolving funds in a few cases in this Committee.

This is one area where it is never cut. It might be a good idea to set it up.

Last year you indicated that the EDB proposal and indemnification costs would be $6.5 million to $9.5 million.

What are the actual costs coming in at?

Mr. Moore. I will provide the exact number for the record, but the actual figure came in much lower than our original estimates. They are down, as I remember, somewhere around $3 million.

[The information follows:]

EDB Disposal and Indemnification costs

Total costs to date for EDB indemnification and disposal are approximately $3,940,000. The cost of EDB disposal is considerably lower than originally projected, since alternative commercial uses for the chemical have been found through reformulation and reprocessing.

Mr. Moore. The basis for the reduction is that a process was identified where EDB could be reformulated to another chemical that could go back into the commercial use areas. That caused the big reduction.

MAVERICK

Mr. Boland. What caused the delays in registration of the cotton pesticide called Maverick? What is the status of that?

Mr. Moore. I don't know that. I will have to provide it for the record.

[The information follows:]

Pesticide Registration—Maverick

The original application for registration of Maverick was for use on a number of other crops in addition to cotton. Since the applicant did not provide enough data with the application to support registration of the many uses requested, a delay was caused while the Agency informed the applicant that more data was required, and the applicant submitted the required data. Once it was received, the data was given an expedited review.

Since the requested use of this pesticide was for use on food crops, a try-out had to be run of the analytical method used to detect residues of the pesticide. The method for detecting residues of Maverick is complex, and during the method try-out the equipment at the Agency's laboratory malfunctioned. This caused further delay while arrangements were made to use the applicant's laboratory facilities to complete the try-out.

Mr. **Boland**. Is it reasonable to expect that the methodology will be completed to permit registration by the end of April? Supply it for the record.

Mr. **Moore**. Yes, sir.

[The information follows:]

Pesticide Registration—Maverick

The try-out of the analytical method was found to be adequate. The registrant was notified on March 31, 1986, that it will receive an amended registration for use on cotton. The registration is conditional, pending changes to the presticide label and further environmental and wildlife studies.

The Notice and Tolerance will appear in the *Federal Register* during the second week in April.

PESTICIDES ENFORCEMENT

Mr. **Boland**. P-36—under pesticide enforcement, there is a decrease in State enforcement grants. How do you justify this decrease?

Mr. **Moore**. Mr. Chairman, it comes back to the fact that certainly State enforcement is an area that is vital to the success of the program. But, in an era of austerity, you have to make hard choices somewhere, and this is one of the programs where we had to cut the cost to the Agency.

Mr. **Boland**. Okay. Will you submit for the record the status and findings to date of the pesticide team study?

[The information follows:]

Status of TEAM Pesticide Study

The Total Exposure Assessment Methodology (TEAM) consists of a field study designed to measure the exposures of humans to a pollutant, regardless of whether the exposures occur through the air, water, food, or skin. A statistically representative sample of the population is used so that it is possible to make inferences about the entire population of an urban area. Very little is known about the exposures of people to pesticides in nonoccupational settings, so the TEAM study is designed to fill an important data gap.

The first phase of the TEAM pesticides study was carried out in Jacksonville, Florida, in the fall of 1985 using a sample of nine homes. Samples were taken of outdoor air, indoor air, food, water, and for dermal contacts. Analyses were made for 30 pesticides which were recommended by the Office of Pesticide Programs as representative of pesticides used in the community. One home yielded a postive response for 20 pesticides, but the remaining homes were lower. These data were used to prepare an Office of Management and Budget (OMB) submission package in February 1986 seeking approval for a 200-home survey. Assuming that this approval is forthcoming, this 200-home survey will be carried out in April of 1986. Spring is the time of maximum use of home pesticides, and any positive response to the chemicals will be more likely if samples are taken during that season.

The program is being implemented by the Environmental Monitoring System Laboratory in Research Triangle Park (EMSL-RTP) using Research Triangle Institute as the contractor.

HERBICIDE RESISTANT SEEDS

Mr. **Green**. I gather that the industry feels that they are showing great promise in research on herbicide resistant seeds.

Mr. **Moore**. Yes.

Mr. **Green**. Does that pose a threat from the environmental point of view that it would encourage more use of herbicides? Do we have a problem facing us down the road?

Mr. **Moore**. It is true that if you have a herbicide resistant corn plant, for example, it might cause you to be lax on the prudent use of that herbicide, knowing it wouldn't effect the success of the crop.

In some respects, herbicide resistant seeds would be a boon to agriculture, but that is an area we will have to watch closely because increased use of herbicides might become a propensity for ground water contamination and other concerns.

Mr. **Green**. Thank you.

Questions Submitted for Record by Congressman Green

Genetically Altered Soil Bacteria

Question. In 1985, the FIFRA Scientific Advisory Panel reviewed a notification submitted by Monsanto Company to conducted a small-scale field test of a genetically altered soil bacteria.

Are the transcripts from this meeting available to the general public?

Answer. On March 12, 1985, a subpanel of the FIFRA Scientific Advisory Panel met to review a notification submitted by Monsanto Company concerning its intention to conduct small-scale field tests of a microbial pesticide produced through genetic engineering. Monsanto's notification was submitted pursuant to the Agency's Interim Policy published in the Federal Register of October 17, 1984, which requires such notification in order for the Agency to determine whether an Experimental Use Permit (EUP) is required for such testing.

The transcripts of this meeting are not available to the public since they contain confidential business information protected by Section 10(d) of the Federal Advisory Committee Act. However, expurgated copies of Monsanto's submission and supporting documents are available to the public.

Question. What is the status of such research vis-a-vis the EPA?

Answer. In addition to Monsanto's application for an EUP for microorganisms for insect control, the Agency has received two applications for Experimental Use Permits for genetically engineered non-ice nucleating active bacteria for frost control on strawberries. Approval was granted on one of the latter, but subsequently suspended as part of an enforcement action. The second action is under EPA review.

In accordance with the Agency's Interim Policy, 7 notifications have been received concerning intentions to conduct field testing of gentically engineered and nonindigenous microbes.

EPA, along with other Federal agencies, is currently developing a comprehensive policy, which will be completed within the next few months, on the regulation of geneticially engineered and nonindigenous microorganisms.

The fiscal year 1987 ORD Budget also provided an increase in resources for biotechnology research.

SUPERFUND

Mr. **Boland**. Thank you.

We discussed the Superfund with the Administrator. We got to some of the specifics of the problems that you face. What is the current on-board strength in the Superfund program?

Mr. **Thomas**. I will ask Win Porter.

Mr. **Porter**. About 1,500 people on our staff, and 2,500 on contract staff make up our current on-board strength.

Mr. **Boland**. The 1987 request is $1,050,000,000, but first we have to get through 1986.

In August last year you put the Superfund program in a slow down mode. That drew sharp criticism, but you were absolutely right.

Now, six months later, the authorization committees and tax committees have not acted. I just thought we would get that into the record.

Are all EPA Superfund staff protected from RIF's throughout 1986?

Mr. **Porter**. We anticipate that, yes.

Mr. **Boland**. We added 100 FTE in our 1986 bill for Superfund. Are those positions being filled?

Mr. **Kinghorn**. Yes, they are, Mr. Chairman.

Mr. **Green**. Under the current slow down, no new contracts are being let for feasibility studies, designs or cleanups, but enforcement and emergency removal work is being continued?

Mr. **Thomas**. That is correct.

Mr. **Porter**. That is correct, yes.

Mr. **Boland**. Have any exceptions been made to the slow down policy?

Mr. **Porter**. No, we have not made any exceptions in the sense of individual projects being handled differently. We are basically not starting any new projects in any of the areas you mentioned.

Mr. **Boland**. Have any new contracts been awarded for remedial work at any sites?

Mr. **Porter**. No new contracts have been awarded for remedial work.

Mr. **Boland**. Some people argue that it is now impossible to carry on an effective enforcement program, since EPA has lost its leverage to threaten to undertake fund-financed cleanups.

Would you agree with that?

Mr. **Porter**. No, not totally, Mr. Chairman. We are, for example, in the midst of a couple of very good settlements where the people we have been enforcing against have come to the bargaining table and are about to settle with us to do the work themselves.

It is much more difficult, but we are trying to be very aggressive in our Section 106 actions and other things. Certainly, not having the fund creates a major impediment, but I don't think it leaves us helpless.

Mr. **Thomas**. It is not impossible, but as Win says, it is a significant problem for our enforcement program if you don't have the money for removals, money for design, and for remedial actions, and the responsible parties, know you don't.

EMERGENCY REMOVALS

Mr. **Boland**. We understand that while the emergency removal program is continuing, you had to tighten the definition of "emergency" to reduce the number of actions as an economy measure, is that correct?

Mr. **Porter**. That is correct.

Mr. **Boland**. Just how were the criteria changed—what is now required to justify an emergency removal?

Mr. **Porter**. Well, it is basically any imminent endangerment to human health and the environment. We have to ratchet down the definition to be clear we are talking about true emergencies. We will have to handle these on a case-by-case basis.

Mr. **Boland**. And what is the costs and number of emergency removals by quarter from 1985 and 1984? You may supply it for the record.

[The information follows:]

REMOVAL ACTIONS—Environmental Protection Agency Office of Emergency and Remedial Response Removal Actions

Year and Quarter	Obligations (dollar in thousands)	Starts	
		Non-NPL	NPL
1983:			
1st	$1,201.8	12	1
2d	3,538.5	11	10
3d	6,548.4	33	21
4th	13,050.4	26	16
1984:			
1st	9,006.0	24	7
2d	6,999.2	53	11
3d	8,296.9	43	13
4th	16,037.4	49	7
1985:			
1st	6,958.3	32	5
2d	10,730.5	36	12
3d	13,598.4	40	12
4th	29,377.0	41	18
1986:			
1st	4,627.1	21	10

SUPERFUND REAUTHORIZATION

Mr. **Boland**. Superfund sites move through a multi-year pipeline process to final clean up. Just as momentum started to build in Superfund, unfortunately the brakes had to be applied.

How long do you think it will take after reauthorization to get back up to full speed?

Mr. **Porter**. Well, we lost about a year. I think, at this point, even if we got started tomorrow morning, it is going to take a while.

Frankly, it is going to be several years before we get back to where we would have been. We have to ramp up again as fast as we can.

Where it hurts us, Mr. Chairman, is in the actual engineering design phase. We have only 17 on-going now, and 75 are on hold. So, obviously, we can't move to the field until those designs are done. It is going to be a year or two to get back to where we should have been.

Mr. **Boland**. How much has been obligated in 1986, to date?

Mr. **Porter**. In January—we had approximately $206 million to run the program. We planned on a $900 million program. We are running at $200 million right now. We can supply the exact numbers for the record. We have obligated about $100 million.

[The information follows:]

SUPERFUND FY 1986 OBLIGATIONS

The Agency currently has approximately $206 million available for 1986. Of this amount, we have obligated $106 million and plan to obligate another $40 million by the end of March.

Mr. **BOLAND**. If the program were reauthorized tomorrow, how much could be effectively spent by the end of the fiscal year?

Mr. **THOMAS**. Mr. Chairman, may we—that is an issue that we are currently examining in the agency now, and maybe we could provide it for the record.

Mr. **BOLAND**. All right.

[The information follows:]

SUPERFUND OBLIGATIONS WITH REAUTHORIZATION

It is extremely difficult to respond to this question at this time for two reasons. First, many of our projects have been delayed because of the lack of reauthorization and this impact has not been fully analyzed. Second, Congress passed a sixty day interim funding of $150 million and we are in the process of evaluating the impact of this interim measure.

Mr. **THOMAS**. We have a number of projects on hold, as Win indicated. There also is the issue of how fast you can crank some of the processes back up. We are trying to come to grips with how much money we could obligate this year if we got started right away.

Mr. **BOLAND**. Like the EPA and, particularly, the Administrator, this Committee wants to see a strong Superfund bill. It is our judgment that these problems may well require at least $10 billion, but many people don't seem to understand that the rate at which funds can be well spent in any given year is a completely separate issue.

In the past this Committee has had some reservations over Superfund growing faster than EPA could manage it. Do you think those concerns were justified?

Mr. **THOMAS**. I do. Your concerns are absolutely justified.

Mr. **BOLAND**. Is there a chance we will run into some of those same problems again if we try to go from a few hundred million in 1986 to a billion plus in 1987?

Mr. **THOMAS**. I think that the track we are on, which would have given us about $900 million this year, would have led us to that figure next year. I think we have to take a hard look at that, depending upon how far into this year we go before we get full reauthorization. That is why I indicated, in my opening statement, that the $1,050,000,000 that we requested for 1987 is a good mark. I also think that your point and my point is that we really would like to look at it. Do we need less than that when we look at the full reauthorization bill.

Mr. **PORTER**. Can I just add, Mr. Chairman, that one of the problems we have is, that we have fallen behind in the designs, the big money is in the construction phase. It will take some time to get there and obligate that money, because we can't proceed with construction until we complete the design. We have had to cut designs back to a very low level.

Mr. **BOLAND**. What about tripling the activity in the program? Would that bid up prices for analyzing waste samples, since laboratory capacity is basically fixed in the short run?

Mr. **PORTER**. Are you saying it would bid up the price of laboratory sampling?

Mr. **Boland**. Yes.

Mr. **Porter**. I think it probably would, if we tried to move too quickly. We have run into that problem over the last year or two. Certainly it is no problem now, but when I came on board last summer, the prices were escalating pretty rapidly.

I think what we are doing is hitting the capacity of the labs and, frankly, there is a lot of demand in the private sector for this same work.

MANAGEMENT INFORMATION SYSTEMS

Mr. **Boland**. This, of course, is a very complex program, and it has also been plagued by management and coordination problems.

For example, management information systems for tracking such things as enforcement actions and internal schedules have been ineffective.

GAO, in their report last month was not impressed with EPA's progress in establishing information systems. What steps are being taken to respond to these criticisms?

Mr. **Porter**. Well, a number of things. We have a small staff working directly with Henry Longest. He is my Superfund chief who is working full time on this issue. I have been very concerned about it, spending a lot of personal time on it.

What we are trying to do is build a bottom-up system. I am trying to get a system in place for the project managers on their own computers. They in turn could use the data to manage their projects, and headquarters could use the information from this system.

I think we now have had a top-down system. I am trying to build more of a bottom-up system, so we have more confidence in our numbers.

Mr. **Boland**. How long do you think it will take to bring on line a comprehensive Superfund management information system?

Mr. **Porter**. I think we are doing it. What I have asked staff to do, and I am seeing some good information already.

I am not looking in terms of years, but months. I think within the next year we will have a very good system. Frankly, we are making improvements already.

SUPERFUND WASTE

Mr. **Boland**. Last year we had some discussion about the EPA policy of not permitting Superfund wastes to be disposed of at facilities with significant RCRA violations. It seems senseless to clean up the same wastes twice.

Mr. **Porter**. I think we are making progress on that. There is not a large percentage of those 50 or 60 RCRA facilities with problems, that cannot take Superfund waste.

It has been a problem. All we can do, frankly, is work very hard at the RCRA locations. This problem and that ties into the other strategy which is to get the RCRA facilities permitted.

Mr. **Thomas**. I would say, Mr. Chairman, that was an issue we worked hard on developing a very stringent off-site policy on where that Superfund waste would go.

The preference for disposing of the waste is for treatment, whether it is removal or remedial. Then, if it ultimately ends up in landfills, the policy on compliance at that landfill is even beyond minimum RCRA compliance for Superfund waste. It is an extremely stringent policy.

We had extensive input and comment on the policy. I think it is strong.

Mr. **Boland**. How many of the RCRA facilities are currently eligible to receive Superfund wastes? Last year I think you testified 75. It is reflected on page 194 of the hearings.

Mr. **Porter**. I would have to supply it for the record, but we have about 55 commercial land disposal facilities in the country and 10 commercial incinerators. Most of those can receive Superfund waste, but I can give you the number for the record.

[The information follows:]

RCRA Sites Eligible for Superfund Wastes

Facilities are eligible to receive Superfund waste if they meet the compliance and environmental standards under the Agency's Superfund Off-site Policy. The status of a facility's eligibility to receive Superfund wastes is based upon the most recent inspection, which must have been conducted within six months prior to usage. Furthermore, waste from a Superfund site must be matched with an eligible RCRA facility that can handle that particular waste.

Currently, the universe of commercial land disposal and treatment and recycling facilities totals approximately 220. As of January 31, 1986, 31 facilities and handlers were authorized to receive Superfund waste. These 31 facilities have had a compliance evaluation inspection within the last six months, and for land disposal facilities a compliance monitoring evaluation within the last twelve months.

A major effort by the Agency to thoroughly review the commercial land disposal facilities is being undertaken by the Hazardous Waste Ground Water Task Force. Important results from this effort will be to determine the ground water monitoring status of these facilities, and it will provide information that will be used to determine whether the facility should be used to dispose of Superfund waste.

Mr. **Boland**. While EPA has not been sending Superfund waste to leaking landfills, other Federal agencies have continued to do so.

DOD sent 8,000 tons of waste to the Kettleman Hills facility which had significant violations in 1985.

Have any steps been taken across government to assure that these problems don't occur?

Mr. **Porter**. We are working on that. I have met a number of times with Mary Walker, the new Assistant Secretary of DOE and some other folks on that, because it is clearly not something we want to do.

We are trying to work through the problems—they have problems, too, because they have some things to get rid of. We are trying to reach a common understanding to let the whole Federal family abide by the same policy. I think we are making some progress on that.

DOD HAZARDOUS WASTE BUDGET

Mr. **Boland**. Do you have any figures on how much money DOD has in 1987 for hazardous waste site cleanups?

Mr. **Porter**. They have had around $400 million, the most recent numbers I have seen. I don't have the exact figure.

Mr. **Boland**. Did they ask EPA to review that request or comment on DOD's budget?

Mr. **Porter**. Not to my knowledge, no.

Mr. **Thomas**. Through the normal budget review process that OMB demands, we do review the agencies environmental budgets.

I can provide for the record just what part of DOD's budget we reviewed, but through our Office of Federal Activities we review other agencies environmental budgets.

[The information follows:]

REVIEW OF DOD'S ENVIRONMENTAL BUDGET

Federal agencies are directed by Executive Order 12088 to present to the Director of the Office of Management and Budget (OMB) annually a plan for funding pollution abatement and control projects which are needed to meet environmental standards at their facilities. The plan is submitted to the EPA for review and evaluation in accordance with procedures established pursuant to OMB Circular No. A-106. For FY 1987, DOD has proposed 405 projects at an estimated cost of $280 million for pollution abatement at Federal Facilities, these were reviewed by the EPA; 76 are Superfund projects with an estimated cost of $101 million for FY 1987 funding. Since clean-up projects were delegated to other Federal agencies via Executive Order 12316 there is no provision in that E.O. that requires EPA to review their budget requests.

Mr. **Boland**. How many DOD facilities have been proposed or listed on the national priority list?

Mr. **Porter**. There are currently 45 DOD facilities on the NPL.

SUPERFUND ENFORCEMENT ATTORNEYS

Mr. **Boland**. Last year you indicated a significant increase for Superfund enforcement attorneys was requested within the DOJ. How much did the DOJ enforcement staff, actually increase from 1985 to 1986?

Mr. **Porter**. I would have to provide it for the record.

[The information follows:]

DEPARTMENT OF JUSTICE FUNDING

The Department of Justice's staffing levels have increased from 76 staff years in FY 1985 to 111 staff years in FY 1986. This represents an increase of 38 staff years. Once reauthorization occurs, the FY 1987 staffing levels will be revisited, to assure the Department of Justice will have adequate support.

Mr. **Boland**. Is there a similar request pending for 1987?

Mr. **Porter**. I am not sure. I know that has been beefed up. I think it is fair to say we are pleased with the support we are getting from DOJ right now.

CLEAN SITES INC.

Mr. **Boland**. Last year an innovative approach to cleaning up wastes sites was launched by a cooperative industry and environmental group called Clean Sites.

How many sites are being addressed under this particular program?

Mr. **Porter**. There are quite a few, Mr. Chairman. I don't have the exact number. I believe it is on the order of 25 to 30. I can give you the number for the record.

[The information follows:]

CLEAN SITES, INC.

Information available to EPA indicates that, as of March 1986, Clean Sites, Inc. (CSI) has been involved at 51 sites. The primary role of CSI at these sites to date has been working with potentially responsible parties to help them develop proposals for settling with the Agency and assuming the responsibility for cleanup. The Agency is responsible for choosing the response action, whether CSI is involved or not.

Mr. PORTER. Right now we are working on the major settlement in Texas where they have been very active on allocating the cost among those people. I think they have a good program.

Mr. BOLAND. Have clean-ups actually started?

Mr. PORTER. Yes, they have actually cleaned up one site in North Carolina pretty much by themselves, working with industry.

What they are trying to do, primarily, is the front end work, getting them together, developing a sort of institutional framework for cleaning up the sites.

Mr. BOLAND. Do you have any feel for comparative costs for clean-up and design work between the Superfund program and Clean Sites?

Mr. PORTER. I don't have that yet, but we can look into that.

[The information follows:]

COMPARATIVE COSTS BETWEEN SUPERFUND AND CLEAN SITES

There is no reason to assume that costs of the remedial or response action will vary, depending on whether Clean Sites, Inc., has been involved at the site.

Questions submitted for the Record by Congressman Traxler

CONTRACTOR CLAIMS

Question. Do the current REM/FIT contracts contain provisions under which EPA provides indemnification to prime contractors for claims beyond or in the absence of available insurance as provided for under the FEDERAL ACQUISITION REGULATIONS?

Answer. The current REM/FIT and REM II contracts do contain indemnification provisions for claims beyond specified levels of insurance.

Question. It is also true that contractors for REM III and REM IV refused to agree to provisions limiting the scope of indemnification in contracts and instead agreed to renegotiate this issue after Congress acts on Superfund?

Answer. The REM III and REM IV contractors refused to agree to limits on the indemnification pending results of reauthorization negotiations. A renegotiation clause has been included in the contracts.

INDEMNIFICATION

Question. Are the liability risks for cleaning up sites on the National Priorities List those of the government, which is contracting for their clean-ups, or potentially responsible parties, if they are known.

Answer. Under section 107 of CERCLA, the risk of liability rests primarily with potentially responsible parties. To the extent that injuries to third parties or other liabilities result from the cleanup action itself, rather than the original release or disposal of hazardous substances, it is possible that the Federal government or response action contractors may become involved in the litigation.

Question. Is EPA trying to legislatively limit the amounts of indemnification it will provide for Response Action Contractors in the current Superfund reauthorization based on the idea that EPA believes that it can limit the government's liability through establishing a limit on indemnification?

Answer. The limits on indemnification included in the CERCLA reauthorization legislation passed by the House in December are intended to accomplish a number of objectives, including: preserving the opportunity for the insurance industry to return to the hazardous waste market; allowing the Agency and contractor community to properly assess the risk of liability and potential contractor exposure; creating incentives for contractor performance; and protecting the Fund for its intended objectives of hazardous waste cleanup.

Until adequate and affordable response action contractor liability insurance becomes available from the private sector, the Agency supports discretionary indemnification of response action contractors as an interim approach to offset the liability risks associated with Superfund cleanups. Unlimited Federal indemnification has the potential to become a permanent, Federally intrusive insurance program that could discourage the private sector from returning to the market. The risks of liability associated with CERCLA cleanups are then displaced on the taxpayer.

Discretionary indemnification authority with limits will allow the Agency to realistically assess the risks to response action contractors associated with CERCLA cleanups.

Limits and deductibles are an incentive for response action contractor performance, because all liability risks are not automatically covered by the indemnification. Limits and deductibles are also an important incentive to assure that response action contractors adequately participate in the defense of any claims.

We anticipate that limits will be determined based on what is sufficient to offset the liability risk to response action contractors. We therefore do not anticipate that claims against the contractors will frequently exceed the limits that will be established by the Agency. Nevertheless, limits on indemnification do provide protection for the Fund, so that it can be used for its intended objective of nationwide cleanup of hazardous wastes, rather than as a Fund for compensation of victims of toxic or hazardous waste disposal.

Question. Do you really believe setting limits on indemnification can actually limit the government's exposure?

Answer. Yes. However, as stated above, the purpose is not to limit exposure.

Question. Since most design and probably many construction contractors have few real assets, how would legitimate claims be paid if the limits were breached?

Answer. As discussed above, we do not anticipate that legitimate claims will breach these limits. In addition, potentially responsible parties remain liable. We also expect that private sector insurance will become available over the next few years.

Question. Isn't it likely that claims larger than the combined level of indemnification and contractors' assets will simply result in additional claims being brought against the government after contractor assets are exhausted?

Answer. It is possible that claims for amounts exceeding the combined level of indemnification and contractor assets will be brought by third parties. Because the Federal government has indemnified response action contractors, it will probably be involved in the legal defense of such claim from the outset. The potentially responsible parties who contributed to the original release are likely also to be involved in this legal action. (It is more likely that any such action would be heard as a single legal case, rather than as an additional claim after the indemnification has been exhausted.) It is worth noting in this context that the negligence standard included in the House bill will diminish the likelihood that contractors will be held liable. In light of the liability standard and the Federal government's role in defending the claim, there is no reason to assume that these claims will result in exhaustion of the contractor assets.

Question. How will contractor bankruptcies and resultant loss of capability serve the public interest?

Answer. Bankruptcies and loss of contractor capability will not serve the public interest. The Agency therefore supports the indemnification procedures in the House bill, which should minimize the risk of loss of contractor capability.

It is also important to note that the overall legislative approach of the House bill towards response action contractors will minimize the risk of contractor bankruptcies and resulting loss of capability. Potentially responsible parties remain strictly liable under CERCLA, while response action contractors would be subject to a negligence standard under the House Bill.

SMALL BUSINESSES

Question. As a result of recent legislation (RCRA) isn't EPA promulgating a number of regulations that impact on thousands of small businesses?

Answer. Yes. EPA's regulations for small quantity generators, used oil, burning and blending, hazardous waste tanks, and underground storage tanks will impact on thousands of small businesses.

Question. How many small firms, such as dry cleaners or service stations, and other "Main Street" businesses will be affected?

Answer. Regulations for small quantity generators, used oil, burning and blending, and hazardous waste tanks will affect approximately 100,000-150,000 small firms. The universe of underground storage tanks could be much larger—in the range of one million tanks at 300,000 facilities.

Question. How are these small businesses contacted regarding regulations? What outreach mechanisms do you have? How do you solicit their comments and advice in the rulemaking process?

Answer. Program offices work closely with appropriate trade associations to deliver information to their small business members. We have provided over 500 trade associations with bulk quantities of publications for distribution to their members. We have developed industry-specific articles and worked to place them in trade press to reach small business owners and operators who may not be members of trade associations.

We have worked closely with the Small Business Ombudsman's office, the Small Business Administration, and larger "umbrella" groups such as the U.S. Chamber of Commerce and the Small Business Legislative Council to develop articles and notices. These groups provide comments on proposed rules and have participated in rule making workgroups.

Through a grant program we have awarded funds to State and local agencies to conduct a variety of training programs, workshops, and compliance assistance activities for small business affected by the new regulations. Two hotline services (RCRA/CERCLA and Small Business) respond to hundreds of monthly inquiries, requests and questions from the small quantity generator community.

Question. Are the resources allocated for the Small Business Ombudsman adequate to insure effective outreach efforts and effective advocacy on behalf of small businesses within EPA?

Answer. Although the Agency is now in the process of promulgating regulations that will impact on hundreds of thousands of small businesses in the very near future, EPA's Small Business Ombudsman currently has the necessary resources to effectively serve this large constituency. However, we are continuing to closely monitor our needs and responsibilities in this area.

HAZARDOUS WASTE

Mr. BOLAND. The biggest increase in the 1987 request goes to the hazardous waste program, and perhaps rightly so, because the task ahead is vast considering the 1984 RCRA amendments.

Dollars for RCRA up from $237 million to $256.2; work years increase by 19.8 FTEs, just over one percent.

We will start with a status report on the RCRA facilities. At this time last year there were about 1,600 land disposal facilities operating under interim status. The November 8 deadline to certify compliance forced more than 1,000 to close. Two-thirds of the total number of facilities were closed.

I understand that caught you by surprise. Last year you testified that about 100 would be closed.

I realize most of the closures were of small facilities, but what was the net reduction in land disposal capacity nationwide?

Mr. **Porter**. Not a great deal. Again, I can supply the number for the record.

[The information follows:]

Land Disposal Capacity

We are in the process of estimating capacity, potential shortfalls, and long term needs in our land disposal restriction work. Currently, based on input from our Regional staff, we do not see serious capacity shortfalls even though large numbers of land disposal facilities closed due to the November 8, 1985 requirements. The majority of the 58 commercial land disposal facilities certified their compliance with the November 8 requirements and can continue to operate. Most of those who did not certify had planned to close or had closed before this date.

Mr. **Porter**. We are doing studies now, but you are right, most of the people that closed tended to be small facilities, and they tended to be on-site facilities. Only about five or six of the 58 commercial facilites closed. So, most of the facilities continued in operation and all the larger ones.

Mr. **Boland**. Have the closures created dislocations and capacity projects on a regional basis?

Mr. **Porter**. Not really. We think that as we move through the land disposal bans and other restrictions capacity problems may develop. I talked to the Regions about that, and, frankly, I don't see a problem so far. I do think we will have a problem, eventually, as other regulations kick in, but there are dislocations on sort of a regional basis, to some extent. They are not serious, however, at this point.

LAND DISPOSAL COSTS

Mr. **Boland**. How much has the cost of commercial land disposal of hazardous waste increased in the last year?

Mr. **Porter**. I don't know exactly, but it has been substantial. I can supply that for the record.

[The information follows:]

Cost of Land Disposal

Based on a 1984 survey, we estimate an average land disposal cost of $0.38 per gallon, or slightly less than $100 per ton, for those facilities in full compliance with RCRA Part 264 requirements. We do not believe the cost has increased dramatically since the 1984 survey, although if land disposal bans are inplemented, the cost will ncrease, perhaps to more than double the 1984 estimate.

Currently, we have begun another survey effort to gather information on 1985 costs of land disposal.

Mr. **Boland**. Of course, I suppose the best solution to hazardous waste is to avoid the problem before it occurs through waste reduction technologies.

Last year you testified that as the cost of land filling increased, he marketplace would push industry to waste reduction. Is that still your position?

Mr. **Porter**. Yes, and I think it is beginning to happen. I don't have the exact numbers, but I have talked to people in the waste disposal business and they are beginning to see that the waste coming to their incinerators is, (a) more concentrated, and (b) dirtier, which indicates it is being recycled more before it goes to the incinerator unit.

Mr. **Boland**. Considering the crisis imminent in hazardous waste, can you just rely on the marketplace to do its work?

Mr. **Porter**. We are going to have to help it some. One of the biggest impediments I see in the marketplace, and I think Lee would agree, is the time it takes to get a permit.

We are going to have to work hard at bringing people through this permit process. Our efforts in enforcement and other means which promote compliance with requirements like ground water monitoring. What I am concerned about, frankly, is the length of time to permit an incinerator or other facilities which puts us into a multiyear situation where we might have trouble with capacity problems.

Mr. **Boland**. I am sure that you recognize that this is an area that justifies very strong federal leadership, and I guess you have a number of annual conferences in this area?

Mr. **Porter**. Yes, we do.

Mr. **Boland**. You do more than just conferences, I presume?

Mr. **Porter**. We have conferences, and my own staff and I, have been around the country talking to people. What we are trying to do is provide leadership to inform people of the things that have to be done and explain the regulations.

One thing we are working hard on is to be sure the regulations don't get so complex that people don't understand them. That has been a problem at times.

WASTE REDUCTION RESEARCH

Mr. **Boland**. Supply for the record the resources devoted specifically to waste reduction research in 1986 and 1987.

[The information follows:]

RESOURCES (FTE AND EXTRAMURAL DOLLARS) INCLUDED IN OUR FISCAL YEAR 1986 AND 1987 BUDGETS FOR WASTE REDUCTION AND WASTE REDUCTION RESEARCH

[Dollars in thousands]

	Fiscal year 1986	Fiscal year 1987
Waste Reduction:		
FTE	1.0	0.3
Extramural	$478.5	$100.0
Waste Reduction Research (ORD):		
FTE	2.0	2.2
Extramural	$235.0	$236.0

Mr. **Boland**. It seems that research seems to agree that land filling is the most widely used but the least desirable way to handle wastes. Is that your judgment?

Mr. **Porter**. I think that is right. We have to be careful, however, not to oversimplify.

Even when you do other treatment things, you have a residual that goes to the land—as an example sludge from a treatment plant—so we have to have a land disposal option.

WASTE INCINERATION

Mr. **Boland**. I understand Japan currently incinerates the vast share of its wastes, and a few years ago EPA testified that U.S. incineration is only one percent. Is that figure still about right?

Mr. **Porter**. It is pretty small. The latest number I have is that 260 million tons a year of hazardous waste is generated in this country, and our incineration capacity is about two million tons, of which about one-fourth is commercial. So, it is still a small number.

Mr. **Thomas**. Mr. Chairman, I might mention we have a bilateral research agreement with Japan, with 14 or 15 projects in hazardous waste as well as other areas. We recently had our annual meeting with them to review the status of the projects. Hazardous waste is a major problem in Japan, as it is here in the U.S. For instance, they literally store all their PCB wastes. They don't have a disposal technology.

Mr. **Boland**. Obviously, we need to move away from reliance on existing land fills. But the anxiety that arises over hazardous waste prevents newer and better treatment facilities from being licensed.

How do you solve that problem? That is a problem, of course.

Mr. **Porter**. In terms of the siting, Mr. Chairman?

Mr. **Boland**. Yes.

Mr. **Porter**. It is a real problem. We are working on location criteria to help the States and Regions get a better idea of what needs to be considered in siting a facility. We are trying to get out there and talk to people, because it is a major issue.

You are absolutely right; people don't want them in their backyard, so to speak.

I think one answer is, it is going to become so expensive, in my judgment, to dispose of the waste that there will be more recycling and recovery within industry. That is one thing everybody can agree upon, that the more we can do in that area the better.

Mr. **Boland**. From a public policy and health point of view, what share of the waste should be incinerated?

Mr. **Porter**. That is hard to say. We obviously have some things that don't burn, so that is a problem. We have the inorganic material of which we have heavy metals and substances that don't burn. I have not broken it out.

One thing I am doing is, we are trying to prepare a diagram that shows where all the hazardous waste goes and what the quantities are. We are trying to track down all the waste streams, and I will have a better answer when I finish the study.

It is a substantial number, because, basically, all the organic material can be burned while the inorganic cannot.

Mr. **Boland**. How many incinerators would be likely to be licensed by 1990?

Mr. **Porter**. Well, quite a few. I don't have any exact number, but we have—I think several hundred that are on-site at plants now that are going to have to get a permit.

We have about 260 incinerators on-site at plants and only about twelve commercial incinerators. So, the problem is one of getting enough commercial capacity. I think we need to have two or three times that amount at some point.

OCEAN INCINERATION

Mr. **Boland**. We got into ocean incineration a bit yesterday. It is an explosive issue which this Committee got pulled into it in our 1986 bill.

At the Agency's urging, we finally decided against creating additional environmental review hurdles for ocean incineration.

Their arguments are on both sides, but what is your view? What is the best way to go here?

Mr. **Porter**. I think we should have a number of tools. To the extent we preclude any technology, we obviously push things into a tighter corner.

My personal feeling is that we at least should do research on ocean incineration. We have even been stymied in getting research burns going. I would like to see burns occur, I believe in many cases it will make sense to work through the problems using existing technology.

Mr. **Thomas**. Mr. Chairman, I will say, though, that you are right; it is an explosive issue. The prospect of incineration at sea is one the Agency has labored through for quite a while.

I think we followed the proper course of laying out a good strong regulatory process with a lot of opportunities for public comment a research strategy that has led us to the place where we have a good risk analysis of ocean incineration we compared the risk between land and ocean disposal.

We are in the the process of making a determination of whether regulation, and what regulations, are appropriate, as well as what research should be allowed.

We are methodically moving through that process, which is the only way it can be done, with as full an airing of the details as we can. As to whether we will come out of that with a procedure that will allow ocean incineration or not, I am not going to prejudge.

I think we will make that decision during the coming year. But I feel comfortable that it will have as thorough a scientific and technical review of the environmental and public health impacts as well as public input as any decision we will make in that agency.

Mr. **Boland**. When was the last incinerator permitted?

Mr. **Porter**. We permitted an EPA incinerator down in Arkansas fairly recently. That is probably the last one.

Don, do you have anything in mind? That is probably the last one.

Mr. **Ehreth**. Yes.

Mr. **Boland**. Do you have any applications pending for incineration?

Mr. **Porter**. Yes, sir, we do. I don't know the exact amount but we do have several dozen pending.

LAND DISPOSAL REGULATIONS

Mr. **Boland**. And a related issue is EPA's proposed land disposal regulations. The clear intent of the 1984 amendment was to prohibit land disposal of wastes that could leak.

EPA's December regulation made a very liberal interpretation of the law. Some would say an imaginative interpretation. It was a rather liberal interpretation in favor of land filling.

Doesn't that undercut market pressures to move to explore treatment techniques?

Mr. **Porter**. I would disagree with that, Mr. Chairman.

I would like to say, first, that it is a proposal. We also have alternatives that are more technology based that will require treatment of everything on land.

Our proposal will require treatment of 95 percent of the wastes, actually. What we are trying to do is look at the process where people would have an answer for solvents and dioxins up front, so they can make the decision.

The comment period on the proposal has closed as of last month. We have a lot of input on that. We are going to try to make a good decision.

Mr. **Thomas**. I would say, Mr. Chairman, that is a very, very conservative series of proposals, conservative from the point of view of protection of public health and environment and moving away from land disposal.

As Win indicated, if our proposal, or one of the alternatives in that proposal, was implemented, you will find the vast majority of wastes that have been disposed of, in the past untreated in the land, no longer is there.

The presumption is protection of public health and the environment. You cannot dispose in the land unless you can show that protection—a very conservative set of assumptions go into that.

Mr. **Porter**. What we try to do is talk about treatment sufficient to protect human health and environment, not just treatment for treatment's sake.

Mr. **Boland**. If you cannot permit new treatment facilities, is there a chance that the RCRA amendments will cause major economic disruptions between now and 1990?

Mr. **Porter**. I think there is going to be some dislocation if we can't permit new treatment facilities no question about it. We will have to work hard to see that that doesn't happen.

Mr. **Thomas**. There are a couple things we should mention. One, we have the potential under RCRA for an expedited permitting process for research and development and demonstration projects which can help us in developing new treatment technologies.

Also, we have established treatment facilities as very high priorities for permitting. They go to the top of the list and are worked on in that fashion. Finally, we have a joint project between our ORD staff and our program staff aimed at examining how to move new site technology through the development stage to commercialization, and it looks at not only Federal leadership within industry and developing technology, use of Federal sites through the Superfund program, but also how can you expedite permitting, actually move that program to full commercial use.

RCRA DEADLINES

Mr. **Boland**. The 1984 RCRA amendments set statutory deadlines to permit all disposal facilities by 1988 and treatment facilities by 1989.

I suppose the land disposal permitting task may actually be attainable since two-thirds of the facilities went out of business last November.

Are you confident that all operating landfills can be permitted by 1988?

Mr. **Porter**. I think, Mr. Chairman, they will be permitted or closed. It is a zero sum, again.

Some of the 500 that we are trying to write the operating permits for will undoubtedly not survive the process, and a few more will close. I feel confident. I have told the Regions that I intend to meet that deadline. I can't guarantee we will get 500 out of 500, but I think we can come close to it.

Mr. **Boland**. What about the deadlines? You have a 1989 deadline on permitting treatment and incinerator facilities. Can those deadlines ever be met without a lot of help from the States?

Mr. **Porter**. No, these are largely delegated programs. We are going to need a lot of help from the States. We will need help on the permitting and ground water inspections and all the other activities from the States. What we are looking at is a joint effort where the States will do the pre-amendment part of RCRA, and we will do the post-amendment part of it. It will take a strong joint effort.

RCRA DELEGATIONS

Mr. **Boland**. In January, we understand that EPA withdrew authorization from six states: California, New York, Ohio, Connecticut, Maine, and West Virginia.

Why were these programs judged inadequate?

Mr. **Porter**. I think there were a number of things. That was an automatic reversion, as you know. They didn't meet certain criteria, thus they couldn't return interim authorization. I think there were a number of reasons. Their enforcement programs were a lot of the problem.

We didn't see timely and appropriate enforcement in Maine's case. We didn't see enough inspectors. Most of these, I think will work through this year. We expect to have all the States authorized this year. We don't see too many substantial problems.

Just because some States reverted in January, doesn't mean we expect that the State won't be backwith the program within one, two, or three months.

Mr. **Thomas**. You had a number of what I call "regulatory administrative issues" in those States, organizational issues that had to be resolved, because their program has to be equivalent to our program, at least as stringent as our program. They couldn't get these issues resolved by the timeframe that the statute said they had to be resolved, so they automatically reverted. We are working continuously to resolve them. Most of them we feel will be concluded, positively, this year.

Mr. **Porter**. That is right.

Mr. **Boland**. How many states do you expect will not be given RCRA program authorizations?

Mr. **Porter**. There are at least two major States that don't have the legislation. They just don't have the hazardous waste program. There is a problem with those two. In Iowa, the State legislature said they don't want to be in that business. So, we have to run that program. Wyoming is the other major State without a program.

Mr. **Thomas**. I think, ultimately, we are still talking about three or four States at this point, small States who have said, for the time being, we are satisfied to let the Federal government run the program in our state. We may change our mind later, but for now we are not planning on doing it.

GRANT BONUSES

Mr. **Boland**. You grant bonuses to States that authorize earlier. Where do you get the bonus money from?

Mr. **Porter**. We take it from within our State grant funds. That is one method we think is effective in motivating States to seek authorization, particularly for the hazardous waste amendments.

Mr. **Thomas**. It has worked well in the past, as we looked at interim authorization, and the bonus money has been geared towards the work States need to do to move them to the deadline. It has been a real incentive.

Mr. **Boland**. Would you have that flexibility to offer bonuses under an environmental block grant arrangement?

Mr. **Thomas**. I think you could factor that into it, but that is a good example of the things you have to take into account when you think about block grants.

STATE PROGRAMS

Mr. **Boland**. The basic State RCRA grants on page HW-32 increase from $55.5 million to $63 million.

For the most part, EPA must rely on the States for permitting and inspections.

Aren't State programs really the weak link in the RCRA program?

Mr. **Porter**. We certainly have a ways to go. We are trying to spend a lot of time with the States in training and other activities to push hard on them to do this.

I think that is a problem in some States.

Mr. **Boland**. Can the States recover it?

Mr. **Porter**. I think they need to take the enforcement action.

RCRA GRANTS

Mr. **Boland**. What was the request of OMB for basic RCRA grants?

Mr. **Kinghorn**. We can provide it for the record, but I think it was about the level we received.

[The information follows:]

RCRA GRANTS IN FY 1987 OMB REQUEST

The Agency requested $70.2 million for basic RCRA grants in its FY 1987 submission to OMB. The FY 1987 President's Budget requests $63.0 million for this grant program.

EVALUATION OF STATE TRAINING PROGRAMS

Mr. **BOLAND**. Will you provide for the record a progress report on the evaluation of States hazardous waste training programs and model programs?

[The information follows:]

STATE HAZARDOUS WASTE TRAINING PROGRAMS

In FY 1985, EPA made available to the States $354,000 in grant funds specifically earmarked for ground water training. These funds are currently being used to establish in the States a broad foundation of knowledge in the fundamentals of ground water.

In addition, EPA is funding a State Agency Hazardous Waste Fellowship Program which provides academic training to State agency staff. This program has been funded at $264,000 each year since FY 1984. EPA also funds the Hazardous Waste Management Institute which provides training in technical areas to improve the performance of State staff in implementing hazardous waste management programs. EPA has established a pilot Hazardous Waste Management Institute at the University of Wisconsin in Region V and is in the process of establishing the second at John Hopkins University in Region III. Our objective is to establish one Institute in each Region.

EPA provides grant funds to the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) and other Regional associations, such as the New England Waste Management Officials Association (NEWMOA). This year, ASTSWMO is using these funds to hire a training specialist to identify State personnel training needs and to establish a schedule for such training. Additionally, ASTSWMO is using these funds to identify issues critical to State programs and to participate in the development and/or review of various Federal program documents (regulations, guidances, implementation plans, program review criteria, etc.). In the past, ASTSWMO has used EPA grant funds to conduct technical seminars and workshops for its members.

UNDERGROUND STORAGE TANKS

Mr. **BOLAND**. At the bottom of HW-35, there is a big increase in underground storage tank grants, up to $10 million in 1987.

What about this? Is this a bit of overkill? Most States have not even begun to set up programs to deal with underground tanks yet, have they?

Mr. **THOMAS**. Mr. Chairman, it may be overkill. We projected this as we were developing the program last year. We have spent a good bit of time trying to move the underground storage tank program forward, and it was funded this year.

We had projected a need of $10 million. I would say that, as the need is deliberated and as you look at the total State grant allocation between the various programs, I think there is some justification for possibly making some movement between these programs.

I think the increases in underground storage tanks reflected here may be more appropriate in one of the other grant categories.

RCRA ENFORCEMENT

Mr. **BOLAND**. You anticipated my question about that.

Enforcement is what really will ultimately determine success. From all reports, the problems are serious. Wastes are still going into 500 land fills, because they certify their own compliance.

The quality of State inspections is questionable, and it varies widely. EPA's internal computerized information systems are suspect, and there is a critical shortage of enforcement attorneys in the regions, according to GAO.

Is RCRA enforcement more illusion than reality?

Mr. **Porter**. No, I don't think so. We have been out to 450 facilities already, and we have already got a number of violation and administrative orders against them.

We have had at least 30 people who falsely certified or operate without benefit of certifying. On the insurance thing, we hung tough. A lot of people came to that point and said, maybe EPA will give on insurance which had to be obtained by that date.

We didn't give. We are forcing some of those people to close. We have taken a pretty tough line. We have to work hard and very effectively, but I think that we are making progress there.

Mr. **Thomas**. Mr. Chairman, I would also say that the enforcement component of RCRA, both at a State level and Federal level, has in the three years I have been at EPA, grown more than any other component of the programs I have dealt with. The resources have grown, Federal people and dollars, and resources to the States—as well as the programmatic aspects, the specifications of numbers of inspections, and types of inspections.

We have negotiated enforcement agreements with every State that manages the RCRA program specifying the criteria that we would hold them accountable for in enforcement.

We reviewed to determine whether independent enforcement action should be taken by us, if not by them. We put together a groundwater task group out of the headquarters and Regions that literally goes site-by-site to the major facilities to do independent in-depth groundwater inspections.

I would have to say, the kind of inspections, the resources provided, the will at the Federal level—and I believe now at the State level—is just night and day compared to where it was three years ago.

Mr. **Porter**. On the groundwater task force Lee mentioned, they have been around to 12 or 15 of the major commercial facilities. The State of New York has fined one facility $105,000 based on the work our task force did at that site.

So, I think we are making progress. We inspected almost all 1600 facilities last year. We are on track to inspect every land disposal facility every year.

So, we have issues to work through, but Lee is right; we have made a lot of progress.

Mr. **Boland**. The table on HW-42 indicates the dollars increase, but FTEs decrease.

To make the system work, won't additional FTEs be required?

Mr. **Porter**. I am not sure. I think we have sufficient staff. A lot of this—you mentioned the information system. We are working very hard on that to get more effective information management.

I think we have grown pretty rapidly, both in FTEs and dollars, and we need to sort of assimilate our gains and really be effective in with what we have.

It is pretty tough work. We have to work smart as well as hard. I feel like we have a good staff.

Mr. THOMAS. You are looking at a program that doubled, basically, in two years, going from 200 to about 400. The decrease is three workyears out of 400. It is basically a level number.

Mr. KINGHORN. Mr. Chairman, the increases that the President requested last year were increases of 50 percent. Your Committee added another 50 percent.

So, we have doubled the workyears, and total workyears are the same. We carry no decrease at all in total workyears.

Mr. BOLAND. Now, the justification indicates that the facilities will be inspected annually. Many of the States believe that an annual inspection is not enough to insure compliance. What about that?

Mr. PORTER. We have no problem with States inspecting more frequently. We set that at a minimum. I am happy they want to inspect more frequently.

I think some of the larger facilities and some of the ones we think have a history of problems, we will try to be more frequent on than that.

Mr. THOMAS. The States have resident inspectors at some facilities.

Mr. PORTER. That is right.

Mr. BOLAND. What about the other side of the coin, where hundreds of RCRA facilities that have been closed are subject to post-closure, ground water monitoring and corrective requirements. Are these facilities a lower priority than permitting and operating land fills?

Mr. PORTER. Not at all, Mr. Chairman.

My top priorities are permitting and, equally environmentally significant, closures. If we don't work hard on the closures, we will end up with a lot of Superfund sites.

We believe, that within the thousand or so that close, that there are quite a few that are going to be, and proving to be, uncontrollable in the sense that the owner-operator has literally gotten out of business and maybe even out of town.

So, we are having to work hard at those facilities.

FACILITY CLOSING

Mr. BOLAND. Now, hundreds of facilities closed in November. That was many more than expected, as I understand.

Mr. PORTER. I think that is right.

Mr. BOLAND. Why isn't there an increase in 1987 resources to assure their safe closure and monitoring?

Mr. PORTER. I think we are looking again at a zero sum. We have permitting and enclosures and some facilities currently seeking permits will become closures later. On the one hand, there are fewer permitting applications to do than expected, which is a bigger job than closures, although not that much bigger.

But in total we are okay. It will just take hard work on both fronts.

Mr. BOLAND. Bill?

WASTE DISPOSAL AT UNIVERSITIES

Mr. GREEN. Has EPA examined separately the problem faced by colleges and universities in disposing of liquid and bacterial toxic wastes?

Mr. PORTER. Not me. Don, do you want to react?

Mr. THOMAS. We should mention what was done as part of a small quantity generating review.

Mr. PORTER. That is right. We have that issue which relates to a hundred people that have over 100 kilograms of hazardous waste, and a lot of those get picked up in that, so we now regulate the so-called small quantity generators.

Mr. GREEN. Is it possible the non-profit educational institutions should get special treatment or special help?

Mr. PORTER. Well, I am not sure about that. I think we have to treat research the same as far as the disposal of waste.

Mr. GREEN. In terms of standards, given the burden this creates for them, do they need a form of financial assistance, do you think?

Mr. THOMAS. I don't think there is any way to justify that.

Mr. PORTER. The small laundries would give me the same story, I think.

RESIDENTIAL BOILERS

Mr. GREEN. Last year, after an extended period of regulation development, you promulgated regulations which controlled more strictly adulteration of heating oil with hazardous waste and the burning of hazardous waste in residential dwellings.

As you know, I have been pushing for those regulations for some years.

Mr. PORTER. Yes, I have seen your name associated with this issue, yes.

Mr. GREEN. What is the status now of the regulations with respect to the nonresidential matter which, I think, is trailing the other, and other types of boilers?

Mr. PORTER. Maybe it would be good to supply it for the record, because there are a number of waste oil-related activities that are moving on different tracks. But we are in good shape on most of the regulations, particularly the major ones.

[The information follows:]

STATUS OF THE EPA REGULATION OF THE BURNING OF HAZARDOUS WASTE AND USED OIL

REGULATION PROMULGATION

The final rule was published in the November 29, 1985, *Federal Register*. The requirements of the rule became effective as quickly as the regulated community could reasonably be expected to respond. The effective dates of major provisions of the rule are as follows:

Prohibition on marketing or burning hazardous waste or contaminated used oil fuels (e.g., used oil adulterated with hazardous waste and used oil contaminated with metals during use) in residential, commercial, and institutional boilers, November 29, 1985.

Recordkeeping of used oil analyses, November 29, 1985.

Marketer and burner *notification* of waste-as-fuel activities, January 29, 1986.

Transportation controls, March 31, 1986.

Storage controls for hazardous waste fuel, May 29, 1986.

RELATED RULES

Two other rules are being developed to complete the controls on the burning of waste fuels. A rule to list used oil as hazardous waste and to provide special management standards for recycled oil, including used oil fuels, was proposed on November 29, 1985. That rule is scheduled to be promulgated in fall 1986 and would complement the November 29, 1985, final rule discussed above (typically referred to as the Administrative Controls) by regulating storage and transportation of used oil fuel from the point of generation to ultimate burning.

EPA is also developing rules that would control emissions from boilers and industrial furnaces like cement kilns that burn hazardous waste and contaminated used oil fuels. Those rules are scheduled to be proposed in summer 1986.

Mr. **Green**. Mr. Chairman, I have a few other pesticide questions I would submit for the record.

Mr. **Boland**. Sure.

[The following question and the answer thereto follows:]

Question Submitted for the Record by Congressman Green

Data Review Resources

Question. To continue in the pesticide area for a moment, I noted that the October 3 *Federal Register* contained a notice indicating that the EPA was asking pesticide applicants and registrants to "flag" certain types of data demonstrating possible adverse effects. This policy is needed, we are told, because of the volume of data and the limited resources available for its review. Are we to take this to mean we are underfunding this activity?

Answer. This issue in no way signifies that this agency program is underfunded. On the contrary, EPA is easily able to meet these responsibilities with its current resources. In general, studies received in response to call-in and registration standards requirements are not reviewed until sufficient data have been received to support reviews for registration standards, or the conduct of Final Regulatory Standards and Tolerance Reassessments (FRSTR's). The Agency believes that it is more efficient to conduct registration standards reviews and FRSTR's comprehensively, at one time, rather than to review numerous studies pertaining to the same chemical, piecemeal.

However, studies will be scheduled for immediate review if they:

(1) Are submitted under section 6(a)(2) of FIFRA because they show the potential for unreasonable adverse effects;

(2) Are part of a tiered testing requirement;

(3) Were identified as "critical" to resolving health concerns noted in the initial review;

(4) Meet the flagging criteria which have been established for setting triggers for immediate review; or

(5) Are otherwise flagged by the Agency for special attention.

This policy balances program efficiency with timely responsiveness to potentially unreasonable adverse effects of pesticides, and does not signify underfunding.

Mr. **Boland**. How long have you been with EPA?

Mr. **Porter**. Eight months.

Mr. **Boland**. Were you consulting before you came?

Mr. **Porter**. Yes, sir.

Mr. **Boland**. Are you making more money here?

Mr. **Porter**. That is a "when did you stop beating your wife" question.

Mr. **Boland**. I must say, Win, you know the program pretty well.

Mr. **Porter**. I had a good teacher.

Mr. **Boland**. You had a great teacher.

Mr. **Porter**. This guy is tough.

Mr. BOLAND. I know. I don't know of anyone who came to the Administrator's job with better experience in this area than the Administrator.

But we come to the end of the hearings, and we are delighted to have you. We finished them on time. You have a nice weekend for yourself. I want to compliment you on the staff you have and the responses given to this Committee.

This is one of our favorite agencies. It has so much controversy revolving around it in the programs that it administers. And we have had pretty good cooperation between the Agency and the Committee. When we need an answer, we get it, because you have people like your Comptroller who gives us all the answers when we want them and also those who are in charge of the media.

We congratulate you on what you are doing and all of those who are with you.

Mr. THOMAS. Thank you, Mr. Chairman.

Mr. MESSNER. Thank you.

Mr. THOMAS. And we absolutely want you to know we appreciate the cooperation we get from your staff. It really makes managing the agency an easier and better process when we have the cooperation and communication we have.

Mr. BOLAND. If my staff gets too tough on you, let me know. Thank you very much. Have a nice weekend.

Mr. MESSNER. Thank you, Mr. Chairman.

Mr. THOMAS. Thank you.

[The following questions and the answers thereto were submitted for the record:]

Questions Submitted for the Record by Congressman Sabo

DIOXIN STANDARDS

Question. I am concerned about possible threats from environmental exposure to dioxin. What progress has your Agency made in establishing standards for dioxin, particularly in air?

Answer. There are a number of activities underway within EPA related to dioxin and dioxin source categories. These activities are described below.

The Agency is currently preparing a report to Congress on the National Dioxin Study. This effort, which was funded by a special appropriation from Congress of $8.0 million in 1984 and 1985, is nearing completion. Tier 4 of this study will present the results of a significant amount of air emissions testing of various types of combustion sources and will include the cancer risks associated with these emissions.

A principal source category for dioxin emissions is municipal waste combustors. The Agency is developing an integrated strategy for municipal waste combustors that includes (1) a multi-pollutant (toxic metals, dioxins, and acid gases) risk assessment leading to a decision in early 1987 on the need to regulate air emissions, (2) a report that provides example guidance on measures to minimize air emissions (including design and operating conditions and add-on controls), (3) options for regulatory development and (4) short and long-term research needs.

EPA is preparing reports to Congress required under RCRA on (1) design and operating parameters to minimize dioxin emissions from municipal waste combustors and (2) comparative risks of different disposal options (e.g., landfill vs. incineration).

The Agency has also been working toward a decision on whether to list and regulate dioxins and related compounds under the Clean Air Act. As part of this effort, the Office of Research and Development has prepared a Health Assessment Document which has been reviewed and approved by the Science Advisory Board. Current plans are to issue an decision in conjunction with a decision on muncipal waste combustors early next year.

Additional Record Questions from the Committee

ENVIRONMENTAL TOXICITY AND AGING

Question. Last year the Conference Report accompanying the HUD-Independent Agencies Appropriation Bill for FY 1986 included report language that urged EPA to continue improving its environmental analysis related to aging, working with the Quality Assurance Support Laboratory to achieve this objective. Please provide us with a status report on what EPA has done in this area. Does EPA plan to utilize the Quality Assurance Support Laboratory with its human physiology and animal toxicology expertise to develop an integrated environmental assessment program on aging?

Answer. EPA began its investigations of environmental toxicity and the aging process with a workshop sponsored by the EPA-funded interagency Task Force on Environmental Cancer, Heart and Lung Disease. This is the activity referred to in EPA's FY 1986 Appropriations Conference Report. Since then, the Agency has funded, in cooperation with the National Institute of Environmental Health Sciences (NIEHS), a more comprehensive study for $320,000 on this topic by the National Academy of Sciences. The objectives of the study are:

To define current understanding of (a) aging populations and processes, (b) age-related changes in biochemistry that affect the body's ability to detoxify chemicals, (c) the effects of chemicals on the aging process, chronic disease states, and geriatric health, and (d) potential chemical interactions between drugs and environmental pollutants. The scope of work also calls for development of a broadly defined national research agenda.

To discuss present and future impacts that research on aging has on human health, develop critical hypotheses for research, and establish priorities for a research program.

While we await the findings of this in-depth study (due in the spring of 1987), the Agency's Health Effects Research Laboratory (HERL) in the Office of Research and Development is preparing a geriatric animal colony which is now leaving middle age. This activity is being conducted in anticipation of future research on toxicity and aging. (The EPA does not have a quality Assurance Support Laboratory, as referred to in your question.)

Question. Do you plan studies of basic questions on environmental toxicity and aging taking into consideration the need for a fully integrated and multi-disciplinary program (rather than a collection of projects) covering the many different aspects of this important subject in priority order, and the need for a single responsible official to be in charge of implementing the program? What is your timetable? Is not such integration necessary to address the priority needs of the air, water, hazardous waste, pesticides, radiation, noise, and toxic substance program offices?

Answer. Because the issues are complex, the Agency has solicited help from the National Academy of Sciences (NAS) to identify the critical questions. The Agency has deferred making complete decisions on the extent and nature of its research program until the NAS report is finished. The animal colony mentioned in the previous answer is being developed for use by all disciplinary units in the Health Effects Research Laboratory (HERL) that may engage in research on toxicity and aging. It is expected that the eventual design of a research program would involve exclusive use of animals from this colony for consistency and integration.

While we await the findings of the NAS report, several studies of an integrated nature using the aging animal colony would be conducted using funds requested in our FY 1987 President's Budget. These studies include work on reproductive senescence, susceptibility to disease, neurotoxicity, and effects on critical organ systems (pulmonary, cardiovascular, and renal). These studies are integrated across the relevant divisions of HERL. Future research programs in this area will continue to be designed to maximize utilization by as many program offices as possible. The timetable for such research will be set after the NAS report is delivered and the program is more firmly established.

Question. Do you plan studies that take into consideration the desirability of having available as well-characterized cohort of aged individuals in an on-going experimental program for which physiological baseline information and medical histories are already available? What is your timetable?

Answer. The Agency is engaged in several studies on aged humans at its clinical research facility. These include effects of ozone on chronic obstructive pulmonary disease, and the effects of carbon monoxide on ischemic heart disease and behavior. The facility is also cofunding with the National Institutes of Health, the University of North Carolina, and other institutions a longitudinal study of lung growth, starting with children aged 2½. This later study is expected to carry on for many years, following the aging process throughout development. The Agency is awaiting the results of the NAS report before its human research activities are firmly established and integrated with the animal research program. The timetable for future research will be set after the NAS report is received.

Questions Submitted for the Record by Congressman Sabo

REGAINING PROGRAM MOMENTUM

Question. I find the slow pace of hazardous waste cleanups in EPA's Superfund program very discouraging. The State of Minnesota has cleaned up more dump sites during the two years since it enacted its own hazardous waste cleanup program than your Agency has cleaned up across the country in five years. My question is, once the Superfund program is reauthorized what will be EPA's immediate plans for the fifty or so dump sites which recently lost all funding? One of these is the Union Scrap dump site in Minneapolis. Will these sites receive top priority?

Answer. Your statement concerning the slow pace of the hazardous waste cleanup efforts considers only a small part of the broader clean-up effort. For instance, in the last five years, we have either stabilized or cleaned up over 450 sites through our Emergency Removal Program and by compelling responsible parties to initiate cleanup actions.

Once reauthorization occurs the Agency will develop an implementation strategy. The Agency's highest priorities will be to initiate remedial action and remedial design activity that has been frozen and to begin immediate removal actions that have been suspended due to lack of funds. Our next priority will be to provide additional funding for on-going projects and begin new remedial investigations and feasibility studies.

The delay in reauthorization has postponed work for 207 projects at 181 sites. This suspension has affected remedial investigations and feasibility studies, remedial designs and remedial actions. A remedial investigation and feasibility study was scheduled to begin at Union Scrap in the first quarter of FY 1986, and is part of our frozen list. Once reauthorization occurs, this site, along with others that have been frozen, will be funded.

ENVIRONMENTAL
PROTECTION
AGENCY

JUSTIFICATION OF APPROPRIATION ESTIMATES
FOR COMMITTEE ON APPROPRIATIONS,
FISCAL YEAR 1987

ENVIRONMENTAL PROTECTION AGENCY

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ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

BUDGET SUMMARY

The President's request for the Environmental Protection Agency's 1987 budget totals $2,426,466,000 supported by 13,160.7 total workyears, including $1,376,466,000 and 11,444.7 total workyears for the Agency's operating programs, and $1,050,000,000 and 1,716.0 total workyears for the Superfund program. At this time, no new resources are requested for the municipal waste treatment facilities construction program. However, the President will submit a budget amendment for $1,800,000,000 once appropriate reform legislation is enacted. These resources constitute an increase to Superfund and our operating programs of $139,069,000 and a decrease of 200 workyears in 1987.

The 1987 request contains increases for the Superfund and Hazardous Waste programs. Based upon the Administration's reauthorization proposal, requested funding for the Superfund program increases by $188,700,000, to $1,050,000,000, supported by 1,716.0 total workyears in 1987. This funding will support the level of activity that the Agency had planned to achieve in 1987. Pending reauthorization, the level requested may have to be adjusted based on the requirements of the new statute.

To continue the implementation of the new hazardous waste program, which is designed to prevent generation of new Superfund sites, the President's 1987 budget proposes an increase of 20 workyears and $18 million over the 1986 current estimate. These funds will continue to support the Agency's efforts to implement new program responsibilities, such as corrective action, banning wastes from land disposal, development of alternative treatment standards, regulating underground storage tanks and additional enforcement activities.

The 1987 request for enforcement will provide the Agency with the resources necessary to continue successful implementation of its enforcement activities. It includes $130,242,800 supported by 2,260.2 total workyears, an increase of $908,800 and a decrease of 12.0 total workyears. Pending reauthorizing legislation, resources for the Superfund enforcement program are not included at this level. The President's Budget increases resources for hazardous waste enforcement activities. This increase, $2,721,600, is necessary to meet the special compliance monitoring and enforcement requirements of the 1984 legislation. Additional enforcement resources are also requested for enforcement and compliance monitoring to reduce criminal case backlog and the criminal enforcement program.

The 1987 research and development program places emphasis on such high priority Agency programs as acid rain, hazardous waste, and cross-media pollutants. Our request for research activities includes $295,163,300 supported by 1,786.2 total workyears, a decrease of $17,337,500 and 15.4 total workyears. The 1987 acid rain research program continues to be accelerated to ensure that timely information is available to develop effective, scientifically sound, regulatory policies. Major emphasis will be on the development and evaluation of atmospheric models to assess the relative contribution of various sources of acid deposition. The hazardous waste research program in 1987 will be focused to improve the identification and control of hazardous wastes. For example, research will be expanded to develop new techniques to identify compounds containing hazardous wastes, to predict and monitor their movement through the environment, and evaluate innovative control technologies. Cross-media research will address the Agency's air toxics strategy and the effects of pesticides use on groundwater.

Grants to State and local governments are at a level of $270,453,400. All grants directly supporting State operations except hazardous waste state grants are reduced from 1986, reflecting administrative savings and the ability of the States to assume greater responsibility for financing their activities. The $8 million increase for the hazardous waste grants will provide additional support for the requirements of the 1984 legislation and the underground storage tank program.

The 1987 budget request also continues support in the amount of $10,107,300 for the Chesapeake Bay program, which is designed to support Bay States through cost-sharing grants and continue EPA's role in monitoring and modeling. The 1987 request also proposes $5,706,000 for the Great Lakes program. In addition, the budget request contains $7,882,500 for the Coastal Environmental Management program, for water quality management in four important coastal water bodies.

Because the current authorization for the Construction Grant program expired at the end of 1985, the Agency is requesting no funds for 1987 at this time. However, the President will submit a supplemental request for $1.8 billion once appropriate reform legislation is enacted.

A summary of budget authority for EPA's six appropriation accounts is as follows:

EPA's Request by Appropriation Account

	1986 Current Estimate	1987 Budget Authority	Increase + Decrease - 1986 vs 1985
Salaries & Expenses..............	$654,756,000	$687,947,000	+$33,191,000
Abatement, Control & Compliance..	552,763,000	490,785,000	-61,978,000
Research & Development...........	213,793,000	192,734,000	-21,059,000
Buildings & Facilities...........	4,785,000	5,000,000	+215,000
Operating Programs Subtotal..	$1,426,097,000	$1,376,466,000	-$49,631,000
Construction Grants..............	$574,200,000	...	-$574,200,000
Hazardous Substance Response Trust Fund.....................	$861,300,000	$1,050,000,000	+188,700,000
Total....................	$2,861,597,000	$2,426,466,000	-$435,131,000

This level of resources supports Congressional and Administration efforts to reduce the deficit, both in 1986 and 1987. The 1986 estimate includes the 4.3 percent reduction required by the Gramm-Rudman-Hollings legislation as part of the government-wide program to reduce the deficit. The 1987 budget was developed within the $144 billion deficit target mandated in the Balanced Budget and Emergency Deficit Control Act. The Agency's mission will not be significantly affected by these reduced resources.

The following briefly describes the content of each appropriation and the changes within each from the Agency's current 1986 estimates.

SALARIES AND EXPENSES

EPA's request increases by $33,191,000 to $687,947,000, which represents the funding necessary to continue Agency activities without reducing the current on-board level of personnel. This appropriation finances salaries and related costs associated with administering the programs within the Environmental Protection Agency. It incorporates all costs exclusive of grant programs and program-specific contractual agreements. It also provides funding for repair and improvement projects under $25,000.

ABATEMENT, CONTROL AND COMPLIANCE

The Abatement, Control and Compliance appropriation finances contracts, grants, and cooperative agreements for pollution abatement, control and compliance activities. EPA's request decreases by $61,978,000 to $490,785,000 in 1987. The major reason for the decrease is because the President's budget request does not include funding for asbestos-in-schools loans and grants. The 1986 current estimate for this program is $47,849,900. The decrease also supports the Administration's overall commitment to the government-wide initiative to reduce the deficit.

RESEARCH AND DEVELOPMENT

The 1987 budget for the Research and Development appropriation decreases by $21,059,000 to $192,734,000. The decrease reflects a phase out of research programs that have yielded sufficient information to support well-established regulatory programs, as well as those areas of control technology research where industry is capable of applying the information generated by the Agency to date. This decrease also supports the government-wide commitment to deficit reduction.

BUILDINGS AND FACILITIES

EPA requests $5,000,000 for the Buildings and Facilities appropriation, which finances the construction, repair, improvement, extension, alteration, and purchase of fixed equipment of facilities owned, as well as existing facilities occupied by the Environmental Protection Agency. The funds in 1987 will continue to ensure healthy and safe conditions in EPA laboratories, and prevent deterioration of our owned and leased facilities.

CONSTRUCTION GRANTS

The 1987 President's Budget contains no new resources for the Construction Grants program at this time. It is expected that a budget amendment for $1,800,000,000 will be submitted once appropriate reform legislation is enacted. This program provides grants to local public agencies for construction of municipal wastewater treatment facilities to assist States and localities in attaining water quality standards. With available prior year funds, emphasis will be maintained on expeditiously completing and closing out projects. Based on the Administration's legislative proposal, the overriding theme of the program continues to be the need to have States and localities move toward full assumption of program authority.

HAZARDOUS SUBSTANCE RESPONSE TRUST FUND

The 1987 budget requests $1,050,000,000 supported by 1,716.0 total workyears, an increase of $188,700,000 to support the Hazardous Substance Response Trust Fund. Because the taxing authority, which is the major source of funding for this program, expired on September 30, 1985, the Agency is operating a reduced Superfund program. Once reauthorization action is completed, and the program regains its momentum, the requested funding will enable the Agency to achieve its planned level of activity in 1987.

ENVIRONMENTAL PROTECTION AGENCY

Summary of Budget Authority,
Obligations, Outlays and Workyears
By Appropriation
(dollars in thousands)

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Research and Development						
Budget Authority.............	$188,875.0	$212,400.0	$223,400.0	-$9,607.0	$213,793.0	$192,734.0
Obligations..................	192,278.4	212,061.0	223,100.0 1/	-9,607.0	213,493.0	193,344.2
Outlays......................	160,780.5	193,678.0	198,258.8	-2,677.0	195,581.8	204,026.9
Abatement, Control and Compliance						
Budget Authority.............	480,500.0	495,500.0	577,600.0	-24,837.0	552,763.0	490,785.0
Obligations..................	517,985.3	505,911.0	585,784.0 1/	-24,837.0	560,947.0	492,699.9
Outlays......................	441,133.2	488,844.0	532,512.7	-11,272.0	521,240.7	532,473.7
Salaries and Expenses						
Budget Authority.............	665,698.1	670,416.0	684,176.0	-29,420.0	654,756.0	687,947.0
Obligations..................	658,985.6	670,416.0	684,031.0 1/	-29,420.0	654,611.0	687,947.0
Outlays......................	631,419.0	660,901.2	675,498.4	-25,188.0	650,310.4	675,535.6
Permanent Workyears..........	9,904.8	10,227.7	10,595.1	...	10,595.1	10,452.9
Total Workyears..............	11,001.4	11,302.7	11,582.7	...	11,582.7	11,382.7
Buildings and Facilities						
Budget Authority.............	12,500.0	5,000.0	5,000.0	-215.0	4,785.0	5,000.0
Obligations..................	5,228.1	10,190.0	5,148.0	-215.0	4,933.0	7,600.0
Outlays......................	3,872.3	5,195.0	5,449.5	-55.0	5,394.5	8,405.5
Operations, Research and Facilities						
Obligations..................	151.4	300.0	300.0	...	300.0	300.0
Outlays......................	298.7	280.0	500.0	...	500.0	500.0
SUBTOTAL, OPERATING PROGRAMS						
Budget Authority.............	$1,347,573.1	$1,383,316.0	$1,490,176.0	-$64,079.0	$1,426,097.0	$1,376,466.0
Obligations..................	$1,374,628.8	$1,398,878.0	$1,498,363.0 1/	-$64,079.0	$1,434,284.0	$1,381,891.1
Outlays......................	$1,237,503.7	$1,348,898.2	$1,412,219.4	-$39,192.0	$1,373,027.4	$1,420,941.7
Permanent Workyears..........	9,904.8	10,227.7	10,595.1	...	10,595.1	10,452.9
Total Workyears..............	11,001.4	11,302.7	11,582.7	...	11,582.7	11,382.7

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Hazardous Substance Response Trust Fund						
Budget Authority............	620,000.0 2/	900,000.0	900,000.0	-38,700.0	861,300.0	1,050,000.0
Obligations.................	480,405.2	900,000.0	882,000.0 1/	-38,700.0	843,300.0	1.252,000.0
Outlays.....................	360,311.6	670,000.0	480,000.0	-7,590.0	472,410.0	770,800.0
Permanent Workyears.........	1,237.2	1,556.2	1,556.2	...	1,556.2	1,556.2
Total Workyears.............	1,350.3	1,716.0	1,716.0	...	1,716.0	1,716.0
Payment to Hazardous Substance Response Trust Fund						
Budget Authority............	(44,000.0)	...	...	...	...	...
Obligations.................	(44,000.0)	...	...	...	...	...
Outlays.....................	(44,000.0)	...	...	...	...	...
Advances to Hazardous Substance Response Trust Fund						
Budget Authority............	...	...	...	. .	(330,888.0)	(33,000.0)
Obligations.................	...	...	...	...	(330,888.0)	(33,000.0)
Outlays.....................	...	...	...	...	(330,888.0)	(33,000.0)
Construction Grants						
Budget Authority............	2,400,000.0	2,400,000.0	600,000.0	-25,800.0	574,200.0 3/	... 4/
Obligations.................	2,573,964.9	2,500,000.0	1,400,000.0	-25,800.0	1,374,200.0	108,267.0
Outlays.	2,899,742.7	2,650,000.0	2,820,000.0	-258.0	2,819,742.0	2,355,200.0
Scientific Activities Overseas						
Obligations.................	299.4	15.0	10.0	...	10.0	150.0
Outlays.....................	62.3	100.0	268.0	...	268.0	342.0
Revolving Fund						
Obligations.................	533.0	600.0	600.0	-28.0	572.0	750.0
Outlays.....................	-117.0	15.0	-50.0	-28.0	-78.0	-1,250.0
Misc. Contributed Funds						
Obligations.................	36.4	30.0	50.0	...	50.0	40.0
Outlays.....................	8.2	25.0	25.0	...	25.0	25.0

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Reimbursements - Salaries and Expenses						
Obligations.................	17,789.1	20,000.0	20,000.0	-34.0	19,966.0	20,000.0
Permanent Workyears.........	56.8	53.0	53.0	...	53.0	53.0
Total Workyears.............	63.6	62.0	62.0	...	62.0	62.0
Reimbursements - Superfund						
Obligations.................	5,584.1	7,000.0	18,000.0	-398.0	17,602.0	30,000.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY						
Budget Authority............	$4,367,573.1	$4,683,316.0	$2,990,176.0	-$128,579.0	$2,861,597.0	$2,426,466.0
Obligations.................	$4,453,240.9	$4,826,523.0	$3,819,022.0	-$129,039.0	$3,689,984.0	$2,793,098.1
Outlays.....................	$4,497,511.5	$4,669,038.2	$4,712,462.4	-$47,068.0	$4,665,394.4	$4,546,058.7
Permanent Workyears.........	11,198.8	11,836.9	12,204.3	...	12,204.3	12,062.1
Total Workyears.............	12,415.3	13,080.7	13,360.7	...	13,360.7	13,160.7

1/ Obligations for these appropriations reflect the reduction to Consulting Services pursuant to P.L. 99-160: Salaries and Expenses - $145.0; Research and Development - $133.0; Abatement, Control, and Compliance - $710.0. The reduction for Superfund of $240.0 was considered in the estimates for that program.

2/ The 1985 appropriation does not reflect a receipt shortfall of $13,918.0 which could reduce budget authority to $606,082.0.

3/ An additional $1.8 billion has been appropriated pending reauthorization.

4/ An amended budget request for $1.8 billion will be submitted immediately after appropriate reform legislation is enacted.

ENVIRONMENTAL PROTECTION AGENCY

Summary of Budget Authority,
Obligations, Outlays and Workyears
By Media
(dollars in thousands)

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Air						
Budget Authority.............	$234,580.1	$238,511.9	$259,548.4	-$11,160.5	$248,387.9	$239,228.4
Obligations..................	232,624.2	240,879.6	257,426.0	-11,160.5	246,265.5	239,549.0
Outlays......................	233,082.6	255,665.9	229,613.7	-6,624.9	222,988.8	235,868.6
Permanent Workyears..........	1,583.2	1,604.0	1,713.9	...	1,713.9	1,660.2
Total Workyears..............	1,710.0	1,751.6	1,830.6	...	1,830.6	1,791.1
Water Quality						
Budget Authority.............	251,717.3	241,686.2	256,580.4	-11,033.3	245,547.1	217,841.0
Obligations..................	249,909.9	244,426.5	258,852.0	-11,033.3	247,818.7	218,584.0
Outlays......................	240,952.3	241,236.4	246,907.3	-6,595.9	240,311.4	235,732.7
Permanent Workyears..........	1,957.0	2,003.3	2,056.5	...	2,056.5	2,021.1
Total Workyears..............	2,191.5	2,248.6	2,283.0	...	2,283.0	2,181.8
Drinking Water						
Budget Authority.............	85,992.1	88,125.8	91,230.4	-3,923.2	87,307.2	84,126.5
Obligations..................	85,244.9	89,040.4	90,144.0	-3,923.2	86,220.8	84,242.0
Outlays......................	86,081.7	98,286.3	87,423.1	-2,356.7	85,066.4	83,434.7
Permanent Workyears..........	543.4	584.5	595.8	...	595.8	587.8
Total Workyears..............	604.3	642.3	639.8	...	639.8	639.8
Hazardous Waste						
Budget Authority.............	191,912.1	237,353.8	248,544.4	-10,686.8	237,857.6	256,236.2
Obligations..................	194,075.6	240,244.7	248,758.0	-10,686.8	238,071.2	256,144.0
Outlays......................	150,793.3	197,408.7	214,677.5	-5,595.5	209,082.0	239,991.5
Permanent Workyears..........	1,045.2	1,217.9	1,284.5	...	1,284.5	1,301.3
Total Workyears..............	1,176.2	1,367.9	1,442.5	...	1,442.5	1,462.3
Pesticides						
Budget Authority.............	66,928.4	70,506.9	69,836.5	-3,002.9	66,833.6	69,433.1
Obligations..................	70,521.5	71,031.4	70,969.0	-3,002.9	67,966.1	69,467.0
Outlays......................	61,155.0	57,560.2	67,142.7	-1,947.5	65,195.2	68,720.5
Permanent Workyears..........	734.6	735.1	741.2	...	741.2	734.7
Total Workyears..............	797.5	809.1	807.6	...	807.6	803.8

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Radiation						
Budget Authority	13,003.4	9,782.4	10,202.1	-438.6	9,763.5	11,972.0
Obligations	12,354.5	9,828.5	12,707.0	-438.6	12,268.4	11,989.0
Outlays	16,068.9	9,758.4	12,723.5	-325.6	12,397.9	12,136.4
Permanent Workyears	149.1	141.3	155.3	...	155.3	152.0
Total Workyears	161.4	147.3	160.0	...	160.0	157.0
Noise						
Budget Authority	...	...	...	...	...	...
Obligations	...	...	...	...	...	...
Outlays	45.9	469.7	395.9	...	395.9	184.7
Interdisciplinary						
Budget Authority	56,264.1	47,166.3	56,272.8	-2,419.6	53,853.2	47,874.9
Obligations	55,489.9	47,292.6	55,770.0	-2,419.6	53,350.4	48,043.0
Outlays	54,857.8	48,252.6	60,916.3	-1,343.6	59,572.7	52,466.7
Permanent Workyears	482.5	491.0	537.7	...	537.7	544.3
Total Workyears	533.0	521.5	568.2	...	568.2	570.0
Toxic Substances						
Budget Authority	84,536.2	94,952.1	143,331.3	-6,163.1	137,168.2	89,327.7
Obligations	124,604.6	95,511.7	149,397.0	-6,163.1	143,233.9	90,523.0
Outlays	84,562.6	94,151.1	125,687.4	-2,911.3	122,776.1	128,594.4
Permanent Workyears	767.3	796.6	804.8	...	804.8	792.5
Total Workyears	852.2	856.3	865.0	...	865.0	858.2
Energy						
Budget Authority	58,592.2	67,317.3	61,707.7	-2,654.3	59,053.4	59,589.4
Obligations	56,812.5	67,219.5	61,957.0	-2,654.3	59,302.7	59,613.0
Outlays	41,642.6	58,659.6	62,301.4	-857.3	61,444.1	61,349.2
Permanent Workyears	94.1	89.2	88.4	...	88.4	77.2
Total Workyears	105.7	97.7	97.0	...	97.0	85.8
Management and Support						
Budget Authority	291,547.2	282,913.3	287,922.0	-12,381.7	275,540.3	295,836.8
Obligations	287,763.1	283,513.1	288,223.0	-12,381.7	275,841.3	296,137.1
Outlays	264,338.7	282,254.3	298,981.1	-10,578.7	288,402.4	294,056.0
Permanent Workyears	2,548.4	2,564.8	2,617.0	...	2,617.0	2,581.8
Total Workyears	2,869.6	2,860.4	2,889.0	...	2,889.0	2,832.9

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Buildings and Facilities						
Budget Authority	12,500.0	5,000.0	5,000.0	-215.0	4,785.0	5,000.0
Obligations	5,228.1	10,190.0	5,148.0	-215.0	4,933.0	7,600.0
Outlays	3,872.3	5,195.0	5,449.5	-55.0	5,394.5	8,405.5
SUBTOTAL, OPERATING PROGRAMS						
Budget Authority	$1,347,573.1	$1,383,316.0	$1,490,176.0	-$64,079.0	$1,426,097.0	$1,376,466.0
Obligations	$1,374,628.8	$1,398,878.0	$1,499,351.0	-$64,079.0	$1,435,272.0	$1,381,891.1
Outlays	$1,237,503.7	$1,348,898.2	$1,412,219.4	-$39,192.0	$1,373,027.4	$1,420,941.7
Permanent Workyears	9,904.8	10,227.7	10,595.1	...	10,595.1	10,452.9
Total Workyears	11,001.4	11,302.7	11,582.7	...	11,582.7	11,382.7
Hazardous Substance Response Trust Fund						
Budget Authority	620,000.0 1/	900,000.0	900,000.0	-38,700.0	861,300.0	1,050,000.0
Obligations	480,405.2	900,000.0	882,000.0	-38,700.0	843,300.0	1,252,000.0
Outlays	360,311.6	670,000.0	480,000.0	-7,590.0	472,410.0	770,800.0
Permanent Workyears	1,237.2	1,556.2	1,556.2	...	1,556.2	1,556.2
Total Workyears	1,350.3	1,716.0	1,716.0	...	1,716.0	1,716.0
Payment to Hazardous Substance Response Trust Fund						
Budget Authority	(44,000.0)	...	...	...	...	...
Obligations	(44,000.0)	...	...	...	...	...
Outlays	(44,000.0)	...	...	...	...	...
Advances to Hazardous Substance Response Trust Fund						
Budget Authority	...	...	...	...	(330,888.0)	(33,000.0)
Obligations	...	...	...	...	(330,888.0)	(33,000.0)
Outlays	...	...	...	...	(330,888.0)	(33,000.0)
Construction Grants						
Budget Authority	2,400,000.0	2,400,000.0	600,000.0	-25,800.0	574,200.0 2/	... 3/
Obligations	2,573,964.9	2,500,000.0	1,400,000.0	-25,800.0	1,374,200.0	108,267.0
Outlays	2,899,742.7	2,650,000.0	2,820,000.0	-258.0	2,819,742.0	2,355,200.0
Scientific Activities Overseas						
Obligations	299.4	15.0	10.0	...	10.0	150.0
Outlays	62.3	100.0	268.0	...	268.0	342.0

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987
Revolving Fund						
Obligations	533.0	600.0	600.0	-28.0	572.0	750.0
Outlays	-117.0	15.0	-50.0	-28.0	-78.0	-1,250.0
Misc. Contributed Funds						
Obligations	36.4	30.0	50.0	...	50.0	40.0
Outlays	8.2	25.0	25.0	...	25.0	25.0
Reimbursements - Salaries and Expenses						
Obligations	17,789.1	20,000.0	20,000.0	-34.0	19,966.0	20,000.0
Permanent Workyears	56.8	53.0	53.0	...	53.0	53.0
Total Workyears	63.6	62.0	62.0	...	62.0	62.0
Reimbursements - Superfund						
Obligations	5,584.1	7,000.0	18,000.0	-398.0	17,602.0	30,000.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY						
Budget Authority	$4,367,573.1	$4,683,316.0	$2,990,176.0	-$128,579.0	$2,861,597.0	$2,426,466.0
Obligations	$4,453,240.9	$4,826,523.0	$3,820,011.0	-$129,039.0	$3,690,972.0	$2,793,098.1
Outlays	$4,497,511.5	$4,669,038.2	$4,712,462.4	-$47,068.0	$4,665,394.4	$4,546,058.7
Permanent Workyears	11,198.8	11,836.9	12,204.3	...	12,204.3	12,062.1
Total Workyears	12,415.3	13,080.7	13,360.7	...	13,360.7	13,160.7

NOTE:
The 1986 obligation estimates for the operating programs do not reflect the reduction for Consulting Services pursuant to P.L. 99-160; Salaries and Expense - $145.0; Research and Development - $133.0; and Abatement, Control, and Compliance - $710.0. The reduction for Superfund of $240.0 was considered in the estimates for that program.

1/ The 1985 appropriation does not reflect a receipt shortfall of $13,918.0 which could reduce budget authority to $606,082.0.

2/ An additional $1.8 billion has been appropriated pending reauthorization.

3/ An amended budget request for $1.8 billion will be submitted immediately after appropriate reform legislation is enacted.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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AIR

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$80,950.0	$81,852.3	$86,881.1	-$3,735.9	$83,145.2	$84,208.4	$1,063.2
Abatement Control and Compliance	$111,596.8	$115,828.0	$126,328.0	-$5,432.1	$120,895.9	$117,828.0	-$3,067.9
Research & Development	$40,077.4	$40,831.6	$46,339.3	-$1,992.5	$44,346.8	$37,192.0	-$7,154.8
TOTAL, Air	$232,624.2	$238,511.9	$259,548.4	-$11,160.5	$248,387.9	$239,228.4	-$9,159.5
PERMANENT WORKYEARS	1,583.2	1,604.0	1,713.9		1,713.9	1,660.2	-53.7
TOTAL WORKYEARS	1,710.0	1,751.6	1,830.6		1,830.6	1,791.1	-39.5
OUTLAYS	$233,082.6	$255,665.9	$229,613.7	-$6,624.9	$222,988.8	$235,868.6	$12,879.8
AUTHORIZATION LEVELS	Authorization for the Clean Air Act expired September 30, 1981. Reauthorization is pending.						

AIR

OVERVIEW AND STRATEGY

The Clean Air Act authorizes a nationwide program of air quality planning, regulation, enforcement, and research for control of air pollution. The EPA strategy for implementing the nationwide program is based on five major goals: (1) reduce the risk of exposure to air toxics; (2) achieve National Ambient Air Quality Standards (NAAQSs) set to protect public health; (3) increase the capacity and improve the effectiveness of State and local air quality agencies; (4) determine the policy alternatives and strategy options available to address acid deposition and stratospheric ozone depletion; (5) develop and support programs to maintain improvements in air quality; and (6) research to support regulatory programs.

Reduce Risk of Exposure to Air Toxics

In 1987, EPA will continue to better define the nature and magnitude of the air toxics problem and to develop and strengthen the regulatory options for dealing with the problem. In June 1985, EPA completed a comprehensive national strategy for addressing both routine and accidental releases of air toxics. The strategy includes an enhanced and refocused Federal air toxics program to address problems that are national in scope, a new program to help State and local governments strengthen their capabilities to deal with air toxics problems within their boundaries, and an expanded effort to devise strategies to reduce risk from multi-media, multi-source pollutants in specific geographic areas.

In 1987, EPA will continue a more aggressive program for listing and regulating toxic air pollutants under section 112 of the Clean Air Act. Decisions for Federal regulatory actions will be made for 8-12 compounds.

EPA will also continue to develop and promulgate National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 1987. These standards apply to both new and existing sources of hazardous air pollutants. In 1987, EPA will have NESHAPs under development for 14 hazardous pollutants, more than in any previous year. In addition, EPA will propose regulations for controlling toxic air emissions from seven types of hazardous waste treatment, storage, and disposal facilities. EPA's Regional air program staff will provide support in addressing air quality problems associated with Superfund sites on the National Priority List and in issuing the permits required by the Resource Conservation and Recovery Act.

The success of the program for reducing lead in vehicle fuels has prompted the makers of fuels to add new components and additives. In 1987, EPA will take active steps to ensure that substitutes for lead do not contribute to emissions of hazardous air pollutants or degrade the operation of motor vehicle emission controls. EPA will also give high priority to technology assessments for particulate controls for heavy-duty diesel vehicle engines to help ensure that manufacturers meet the technology forcing standards that become effective starting with the 1988 model year.

Achieve NAAQSs Nationwide

The establishment of NAAQSs at levels that protect public health and prevent other adverse effects has been the keystone of the national air quality program. The need to revise NAAQSs is determined based on regular assessment of the most accurate and up-to-date scientific data available on the health and other effects of the various pollutants. In 1987, EPA will promulgate revised or reaffirmed NAAQSs for sulfur dioxide and size-specific particulate matter (PM_{10}). EPA will also propose to revise or reaffirm the NAAQSs for lead.

EPA's strategy for achieving the NAAQSs centers on working with States to complete and enforce the State Implementation Plans (SIPs) required by the Clean Air Act. Although air quality has generally improved as a result of the measures in SIPs, many of the SIPs have proven inadequate to meet NAAQSs by statutory deadlines.

The NAAQS for ozone has proven the most difficult standard to meet. As many as 35 of the 53 large urban areas now in violation of the standard will still not meet the standard by December 1987. The affected population of these post-1987 nonattainment areas could total over 80 million. In 1987, EPA will give priority to strengthening control of the volatile organic compounds (VOCs) that contribute to ozone formation. EPA's ozone reduction program for 1987 will be based on an aggressive strategy that will be completed in 1986.

A continued reduction in emissions from motor vehicles will be a major factor in meeting NAAQSs, particularly the standards for ozone, carbon monoxide, and nitrogen dioxide. To help ensure that manufacturers design and produce vehicles that meet emission standards throughout their useful lives, EPA will maintain a comprehensive Federal compliance program. This program includes preproduction certification of emission control systems, selective enforcement audits at manufacturers' facilities, and recalls of insufficiently controlled vehicles. In 1987, EPA will tighten control of vehicle refueling and evaporative emission losses and of heavy-duty vehicle exhaust emissions.

Tampering with vehicle emission control systems, switching to leaded fuels, and failing to properly maintain engines greatly increase pollutant emissions. Federal efforts alone cannot effectively address these problems. EPA will continue to work with State and local governments to establish and maintain effective vehicle inspection and maintenance programs and anti-tampering/anti-fuel switching programs.

In addition to remedying SIPs still inadequate to meet NAAQSs and ensuring compliance of in-use vehicles, the States and EPA will carry out a vigorous, comprehensive program aimed at achieving continuous compliance by stationary sources, particularly major sources in or affecting areas not meeting the health-related NAAQSs. The program will emphasize implementation of the "timely and appropriate" guidance, the Post-1982 Enforcement Policy, and guidance defining a Federally reportable violation. In the enforcement of SIPs, sources of VOCs affecting ozone levels in areas not meeting standards will receive increased attention. Emissions from these sources are of concern, not only because they contribute to unhealthful ozone levels, but also because their components may be hazardous to public health.

Strengthen State and Local Programs

EPA will continue to support State and local air pollution control programs by identifying obstacles to program effectiveness, providing direct program assistance, facilitating information exchange, and maintaining national monitoring and data management systems. The National Air Audit System, used to identify obstacles to State and local control agency effectiveness and to help EPA define more efficient and meaningful national programs, will continue on the biennial cycle begun in 1986. During 1987, all State and key local agencies will be evaluated using national criteria for five major program areas: air quality planning, new source review, compliance assurance, air quality monitoring, and vehicle inspection and maintenance. The results of the national audit will be used to identify both the problems of individual State and local agencies and more generic national problems.

During 1987, State and key local agencies, with the support of EPA Regional Offices, will initiate the actions necessary to address the problems identified by the 1986 audits. Nationally, EPA will use the results of the 1985 and 1986 summary reports to review and adjust priorities and resources to better support State and local needs and achieve the desired environmental results. The Section 105 State grant program will be included in an anticipated legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs.

Address Acid Deposition, Stratospheric Ozone Depletion, and Indoor Air Pollution

In 1987, EPA will carry out an acid deposition program that includes accelerated research and analyses of policy and implementation issues. The EPA Office of Research and Development will continue to develop the scientific and technical information required to respond to policy issues. The Office of Air and Radiation will insure that research efforts are focused on policy information needs and will review new research results for their policy implications. EPA will continue in 1987 to identify and resolve possible implementation issues through the State Acid Rain (STAR) program.

Section 157 of the Clean Air Act requires EPA to issue regulations to reduce chlorofluorocarbon (CFC) emissions if the Administrator of EPA determines that the emissions endanger public health and the environment. In response to a suit brought by the Natural Resources Defense Council, EPA developed and adopted a comprehensive CFC action strategy in 1985. To carry out this strategy, EPA will focus during 1986 on developing a national and international consensus on the nature and magnitude of the CFC problem. In 1987, EPA will announce a decision on the need for regulatory actions to control CFCs.

Research by EPA and others indicates that health risks result from indoor exposure to air pollutants, as well as ambient exposures. Some of the risks associated with indoor air pollution may be substantial. EPA will examine how existing EPA programs can be adjusted to reduce total exposure to unhealthful air quality.

Maintain Air Quality

EPA, States, and local agencies must protect the gains made in improving environmental quality. In 1987, EPA will continue to develop national, technology-based New Source Performance Standards (NSPSs) for all major source categories. Fifteen NSPSs will be promulgated. An additional four NSPSs will be proposed or under development.

In 1987, EPA will continue to give priority to improving the effectiveness of EPA and State compliance monitoring inspections. EPA will support application of the Model Surveillance Targeting Program, completed in 1986, to provide more systematic and efficient inspection programs. EPA will also continue to actively promote the integration of continuous emissions monitoring (CEM) into the continuous compliance program. During 1987, EPA will complete guidance for addressing malfunctions of control equipment and process operations.

In 1987, EPA will complete promulgation of SIPs to protect visibility in pristine areas of those 34 States that did not prepare their own plans.

Continue Research to Support Regulatory Programs

In 1987, the Office of Research and Development will continue to provide the monitoring methods, air quality models, health and welfare assessments, and emission reduction technology evaluations required to review NAAQSs, promulgate NSPSs and NESHAPs, and develop SIPs.

Research to determine the atmospheric transport, transformation, and fate of air pollutants will continue, with increased emphasis on the formation of toxic air pollutants from initially innocuous compounds. In addition, studies will be done to determine the effects of particle soiling on buildings and materials.

The regulatory review schedule for NAAQSs requires a shift in emphasis in the scientific assessment program. In 1987, the focus will be on oxides of nitrogen, particulate matter, sulfur oxides, and carbon monoxide. In line with the Agency's program to regulate and control potentially toxic air pollutants, comprehensive health assessment documents for hazardous air pollutants will be provided.

The monitoring systems and quality assurance program will continue to provide monitoring data, develop and validate monitoring methods for air pollutants, and provide quality assurance support. The emphasis in 1987 will be on continued development of the Toxics Air Monitoring System and related toxic air pollution monitoring, and on developing and refining total human exposure measurement methods.

Health research on criteria air pollutants will continue to focus on developing test methods, producing dose/response data, and developing techniques to extrapolate animal data to humans. In keeping with the regulatory schedule, the emphasis will be on the effects of nitrogen dioxide and particulate matter. Increased effort will be directed to ascertaining the health effects of toxic air pollutants.

The environmental engineering and technology program will continue to assess the performance, cost, and reliability of emission reduction technologies and provide technical assistance to Regional Offices to support permitting, NSPSs, and compliance activities.

Research will be enhanced on the potential health and environmental effects of increased levels of ultraviolet radiation, particularly in the wavelength range of approximately 290-300 nanometers (UV-B radiation). UV-B radiation levels increase when stratospheric ozone layer is depleted. The adverse effects of air pollution on vegetation will be studied, as will the effects of particles on visibility.

AIR

PROGRAM ACTIVITIES	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
National Ambient Air Quality Standards					
Number of Pollutants Covered (Cumulative)........	6	6	6	6	--
Proposals*....................	2	1	1	1	--
Promulgations*..............	0	2	2	0	+2
New Source Performance Standards					
Source Categories Covered (Cumulative).......	59	74	65	77	+12
Proposals**..................	3	6	14	1	-13
Promulgations**.............	11	12	10	15	+5
National Emission Standards for Hazardous Air Pollutants					
Number of Source Categories Covered (Cumulative)........	27	0	30	32	+2
Number of Pollutants Covered (Cumulative)........	5	6	6	7	+1
Proposals**..................	2	2	1	1	--
Promulgations**..............	0	3	5	2	-3
Enforcement Actions -- Stationary Sources					
Inspections..................	1,726	1,725	1,725	1,694	-31
Notices of Violations.........	247	200	230	238	+8
Administrative Orders.........	101	92	105	131	+26
Civil Litigation..............	135	167	117	121	+4
Criminal Litigation...........	13	6	14	14	--
Enforcement Actions -- Mobile Sources					
State and Local Tampering/Fuel Switching Programs (Cumulative).	19	32	28	37	+9
Assembly Line Testing...........					
Test Orders......................	17	17	21	21	--
Recall Investigations...........	35	40	35	20	-15
Notices of Violations					
° Tampering/Fuel Switching...	645	420	450	450	--
° Lead........................	6	32	32	50	+18

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* Revisions or reaffirmations

** New Source categories and revisions (for example, the 5 NESHAPs promulgations in 1986 include 3 new source categories and 2 revisions)

** Current estimates are based on revised criteria

NOTE: All outputs are incremental except as indicated.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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Air Quality Research

(DOLLARS IN THOUSANDS)

PROGRAM	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Characterization, Transport And Fate - Air							
Salaries & Expenses	$2,690.7	$2 765.6	$3,818.7	-$164.3	$3,654.4	$3,753.1	$98.7
Research & Development	$6,384.1	$6,629.4	$7,847.5	-$337.4	$7,510.1	$8,170.0	$659.9
TOTAL	$9,074.8	$9,395.0	$11,666.2	-$501.7	$11,164.5	$11,923.1	$758.6
Scientific Assessment - Air							
Salaries & Expenses	$3,089.7	$3,067.7	$3,023.3	-$129.9	$2,893.4	$2,801.1	-$92.3
Research & Development	$3,072.6	$2,686.2	$2,975.3	-$127.9	$2,847.4	$2,538.0	-$309.4
TOTAL	$6,162.3	$5,753.9	$5,998.6	-$257.8	$5,740.8	$5,339.1	-$401.7
Monitoring Systems And Quality Assurance - Air							
Salaries & Expenses	$6,360.3	$6,321.0	$6,184.3	-$265.9	$5,918.4	$6,695.4	$777.0
Research & Development	$6,717.7	$8,559.9	$12,378.7	-$532.3	$11,846.4	$10,702.0	-$1,144.4
TOTAL	$13,078.0	$14,880.9	$18,563.0	-$798.2	$17,764.8	$17,397.4	-$367.4
Health Effects - Air							
Salaries & Expenses	$8,781.3	$7,497.7	$7,312.6	-$314.4	$6,998.2	$8,204.6	$1,206.4
Research & Development	$15,147.9	$14,583.4	$14,852.0	-$638.7	$14,213.3	$10,373.0	-$3,840.3
TOTAL	$23,929.2	$22,081.1	$22,164.6	-$953.1	$21,211.5	$18,577.6	-$2,633.9
Environmental Engineering And Technology - Air							
Salaries & Expenses	$3,538.8	$3,809.8	$3,967.1	-$170.5	$3,796.6	$3,940.0	$143.4
Research & Development	$4,897.7	$4,459.5	$6,101.4	-$262.4	$5,839.0	$3,514.0	-$2,325.0
TOTAL	$8,436.5	$8,269.3	$10,068.5	-$432.9	$9,635.6	$7,454.0	-$2,181.6

AIR

Air Quality Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
Environmental Processes And Effects - Air							
Salaries & Expenses	$1,713.8	$1,777.3	$853.3	-$36.8	$816.5	$668.4	-$148.1
Research & Development	$3,157.6	$3,013.2	$1,346.6	-$57.8	$1,288.8	$1,000.0	-$288.8
TOTAL	$4,871.4	$4,790.5	$2,199.9	-$94.6	$2,105.3	$1,668.4	-$436.9
Stratospheric Modification Program							
Salaries & Expenses	$104.9						
Research & Development	$699.8	$900.0	$837.8	-$36.0	$801.8	$895.0	$93.2
TOTAL	$804.7	$900.0	$837.8	-$36.0	$801.8	$895.0	$93.2
TOTAL:							
Salaries & Expenses	$26,279.5	$25,239.1	$25,159.3	-$1,081.8	$24,077.5	$26,062.6	$1,985.1
Research & Development	$40,077.4	$40,831.6	$46,339.3	-$1,992.5	$44,346.8	$37,192.0	-$7,154.8
Air Quality Research TOTAL	$66,356.9	$66,070.7	$71,498.6	-$3,074.3	$68,424.3	$63,254.6	-$5,169.7
PERMANENT WORKYEARS							
Characterization, Transport And Fate - Air	40.0	44.0	55.2		55.2	55.6	.4
Scientific Assessment - Air	50.1	48.3	52.9		52.9	53.7	.8
Monitoring Systems And Quality Assurance - Air	107.5	103.1	102.2		102.2	107.2	5.0
Health Effects - Air	106.5	115.5	130.6		130.6	118.6	-12.0

AIR

Air Quality Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
Environmental Engineering And Technology - Air	57.9	51.5	65.3		65.3	66.3	1.0
Environmental Processes And Effects - Air	22.9	21.7	7.7		7.7	7.3	-0.4
Stratospheric Modification Program	2.1						
TOTAL PERMANENT WORKYEARS	387.0	384.1	413.9		413.9	408.7	-5.2
TOTAL WORKYEARS							
Characterization, Transport And Fate - Air	47.4	46.5	61.7		61.7	61.7	
Scientific Assessment - Air	58.4	57.6	56.8		56.8	56.8	
Monitoring Systems And Quality Assurance - Air	115.8	119.7	118.2		118.2	123.2	5.0
Health Effects - Air	120.6	132.2	130.6		130.6	133.6	3.0
Environmental Engineering And Technology - Air	63.7	71.0	71.5		71.5	72.5	1.0

AIR

Air Quality Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Environmental Processes And Effects - Air	28.8	27.9	12.3		12.3	12.3	
Stratospheric Modification Program	2.1						
TOTAL WORKYEARS	436.8	454.9	451.1		451.1	460.1	9.0

AIR

Air Quality Research

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Provide Scientific Support to Develop and Review Primary and Secondary NAAQS

- o Journal article on the dosimetry of selected fine mode particles in human and animal lungs (Health)
- o External review drafts of Air Quality Criteria Document (AQCD) for carbon monoxide and oxides of nitrogen (Sci. Assessment)

Objective 2: Provide Scientific Support to Develop NSPS and SIPs

- o Users guide for evaluating complex terrain model for stable plume impaction (Charact. & Transport)
- o Report on reference and equivalent methods program for 1986 (Monitoring)

Objective 3: Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants

- o Five comprehensive Health Assessment Documents (Sci. Assessment)
- o Status reports on the Baltimore and California Total Exposure Assessment Methodology (TEAM) studies (Monitoring)

Objective 4: Provide Scientific Support to the Mobile Source Regulatory Program

- o Article on the impact of methanol fuels on evaporative emissions (Charact. & Transport)
- o Status report on population exposure research activities, including exposure models (Monitoring)

Objective 5: Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment

- o Final report on evaluation of the effectiveness of residential radon mitigation for building code officials, home builders and homeowners (Env. Technology)

1986 PLANNED OUTPUTS

Objective 1: Provide Scientific Support to Develop and Review Primary and Secondary NAAQS

- o Final AQCDs for ozone and lead (Sci. Assessment)
- o Annual report on Inhalable Particulate Network (Monitoring)
- o Journal article on model of regional uptake of O_3 and NO_2 in the lungs (Health)

Objective 2: Provide Scientific Support to Develop NSPS and SIPs

- o Users guide for model using new dispersion techniques (Charact. & Transport)
- o Final report on pilot scale cement kiln test to evaluate applications of NO_x control combustion modification (Env. Technology)

Objective 3: Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants

- Six comprehensive Health Assessment Documents (Sci. Assessment)
- Draft final report on residential wood combustion emission laboratory measurements from Phase I Integrated Air Cancer Field Study (Env. Technology)

Objective 4: Provide Scientific Support to the Mobile Source Regulatory Program

- Article on the emission rates of mutagenic gasoline hydrocarbons (Charact. & Transport)
- Journal article on low level effects of CO on exercising angina patients (Health)

Objective 5: Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment

- Report of multipollutant field survey pilot study for indoor air quality (Monitoring)
- Peer reviewed manual for homeowners on low cost radon mitigation techniques (Env. Technology)
- Journal article on dose response of wheat yield to UV-B radiation simulating 0-15% stratospheric ozone depletion (Strat. Mod.)

1985 ACTUAL OUTPUTS

Objective 1: Provide Scientific Support to Develop and Review Primary and Secondary NAAQS

- Final report on a five year study of air quality (Monitoring)
- Report on effects of NO_2 in exercising asthmatics (Health)

Objective 2: Provide Scientific Support to Develop NSPS and SIPs

- Project report and summary: The Evaluation of Chemical Mechanisms for Photochemical Smog (Charact. & Transport)
- Final report on the National Air Pollution Background Network (Monitoring)

Objective 3: Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants

- Report on the atmospheric reaction products from HAP degradation (Charact. & Transport)
- Seventeen comprehensive Health Effects Documents (Sci. Assessment)
- Final report on source emissions of copper compounds for NESHAP development (Env. Technology)

Objective 4: Provide Scientific Support to the Mobile Source Regulatory Program

- Journal article on real time measurements for CO characterization of in-use three-way catalyst vehicles (Charact. & Transport)
- Journal article on "Measuring Human Exposure to Carbon Monoxide in Washington, D.C., and Denver, Colorado." (Monitoring)

Objective 5: Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment

- Proceedings of workshop on state of the art emission characterization for Indoor Air Quality Committee (Env. Technology)
- Journal article on the response of estuarine diatom assemblages to UV-B radiation (Strat. Mod.)

AIR

Air Quality Research

Budget Request

The Agency requests a total of $63,254,600 supported by 460.1 total workyears for 1987, a decrease of $5,169,700 and an increase of 9.0 total workyears from 1986. Of the request, $26,062,600 will be for the Salaries and Expenses appropriation and $37,192,000 will be for the Research and Development appropriation, an increase of $1,985,100 and a decrease of $7,154,800, respectively.

Program Description

This research program provides the technical support needed to issue and enforce regulations implementing the Clean Air Act, including national standards for "criteria" pollutants and for hazardous air pollutants (HAPs) from a variety of sources. The following objectives support these efforts:

Objective 1. Provide Scientific Support to Develop and Review Primary and Secondary NAAQS. This research program provides the scientific data needed to issue and revise national standards for emissions of criteria pollutants.

Objective 2. Provide Scientific Support to Develop NSPS and SIPs. This research supports issuance and revision of New Source Performance Standards (NSPS) and State Implementation Plans (SIPs) through development of models and monitoring techniques for air pollutants and engineering studies of control technologies.

Objective 3. Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants. Under this objective EPA conducts research to identify and control emissions of air pollutants from a variety of sources that are hazardous to human health but not already regulated as criteria pollutants.

Objective 4. Provide Scientific Support for the Mobile Source Regulatory Program. This research evaluates the health effects of, and monitoring techniques for, air pollutant emissions from mobile sources.

Objective 5. Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment. This program supports research on global environmental problems such as atmospheric changes and the effects of ultraviolet radiation. Indoor air research is also conducted under this objective.

CHARACTERIZATION, TRANSPORT AND FATE

1987 Program Request

The Agency requests a total of $11,923,100 supported by 61.7 total workyears for this program, of which $3,753,100 will be for the Salaries and Expenses appropriation and $8,170,000 will be for the Research and Development appropriation. This represents an increase of $98,700 and $659,900, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The increase in Research and Development reflects increased emphasis on hazardous air pollution research.

Provide Scientific Support to Develop and Review Primary and Secondary NAAQS. Research will be conducted to assess the influence of particle size and composition on soiling and visibility. A two-year study of the influence of fine and coarse mode particle soiling on glass and paint will be completed. Research to assess the sources of visibility impairment will continue, and field studies will continue to be conducted to determine the contribution of various types of fine particles to visibility reduction, and to identify the sources of these particles.

Provide Scientific Support to Develop NSPS and SIPs. A variety of models are being developed to support NSPS and SIPs. Models to predict chemical and physical reactions in the atmosphere are being developed at the urban and regional scale and for complex terrain to support development of effective control strategies for SIPs. Studies to adapt O_3 regional scale models for use in secondary standards will be conducted. A regional fine particulate/innalable particulate model will be developed.

Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants. With the use of specially designed smog chambers, research will be conducted to determine pollutant lifetimes and their atmospheric transformation products to support the Agency's air toxics strategy. Also, studies will be conducted to characterize evaporative and exhaust emissions from mobile sources. New studies will be initiated to determine the extent to which hazardous air pollutants are produced in the ambient air from pollutants that were originally less harmful. As part of the Integrated Air Cancer Program (IACP), studies will be done to determine the carcinogenic and mutagenic potential of air sheds containing wood combustion emissions. Field studies will be undertaken to measure human exposures to toxic air pollutants. In addition, technical assistance to the Regions and States on air toxics problems will be expanded.

Provide Scientific Support to the Mobile Source Regulatory Program. Research on the impact of low ambient temperature on the emission rates of air pollutants from light duty motor vehicles will continue. The effects on evaporative emissions of alternative fuels and different fuel compositions during vehicle refueling will be studied. Research to evaluate the impact of heavy duty diesel particulate control devices on emission rates and chemical composition will be initiated.

1986 Program

In 1986, the Agency is allocating a total of $11,164,500 supported by 61.7 total workyears for this program, of which $3,654,400 is from the Salaries and Expenses appropriation and $7,510,100 is from the Research and Development appropriation.

In 1986 the program reflects increased emphasis on HAPs. A report is in preparation on the identification, screening, and measurement of HAP concentrations in ambient air. An article is in progress on the recommended parameters to be used in visibility models. Improved O_3 chemistry mechanisms are being developed for incorporation into air quality simulation models.

1985 Accomplishments

In 1985, the Agency obligated a total of $9,074,800 supported by 47.4 total workyears for this program, of which $2,690,700 was from the Salaries and Expenses appropriation and $6,384,100 was from the Research and Development appropriation.

In 1985, improved O_3 and NO_2 chemical mechanisms for urban scale O_3 modeling were developed. Also, a report was published on the atmospheric reaction products from HAP degradation.

SCIENTIFIC ASSESSMENT

1987 Budget Request

The Agency requests a total of $5,339,100 supported by 56.8 total workyears for this program, of which $2,801,100 will be for the Salaries and Expenses appropriation and $2,538,000 will be for the Research and Development appropriation. This represents a decrease of $92,300 and $309,400, respectively, and no change in total workyears. These reductions reflect the Agency's success in diminishing the backlog of Health Assessment Documents.

Provide Scientific Support to Develop and Review Primary and Secondary NAAQS. During 1987, external review draft air quality criteria documents (AQCD) will be published for oxides of nitrogen and carbon monoxide. Following promulgation of the NAAQS, the Agency will also begin to assess the health and welfare effects data that have become available since the last revision of the AQCD on particulate matter and sulfur oxides. In addition, technical analyses will be prepared for the Office of Air and Radiation to support their proposal and promulgation of revised NAAQS for lead and ozone.

Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants. Five comprehensive health assessment documents and eight Tier I Health Effects Summaries will be completed in accordance with the Agency regulatory schedule. Eight additional Tier I documents will be initiated. In addition, toxic air pollution assessments for mobile sources emissions and technical assessments in support of State and regional air toxics problems will be provided.

1986 Program

In 1986, the Agency is allocating a total of $5,740,800 supported by 56.8 total workyears for this program, of which $2,893,400 is from the Salaries and Expenses appropriation and $2,847,400 is from the Research and Development appropriation.

In 1986, the final AQCDs for lead and ozone are being prepared. Fourteen Tier I documents are in the process of being completed and eight more are being initiated. In addition, six comprehensive health assessment documents or external review drafts are expected to be completed.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,162,300 supported by 58.4 total workyears for this program, of which $3,089,700 was from the Salaries and Expenses appropriation and $3,072,600 was from the Research and Development appropriation.

During 1985, the first external review draft (ERD) of the AQCD for ozone was modified to respond to comments by the Science Advisory Board and the second ERD of the lead AQCD was published. Four Tier I documents and seventeen health assessment documents were provided. Work progressed on fourteen Tier I summaries.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Budget Request

The Agency requests a total of $17,397,400 supported by 123.2 total workyears for this program, of which $6,695,400 will be for the Salaries and Expenses appropriation and $10,702,000 will be for the Research and Development appropriation. This represents an increase of $777,000 and a decrease of $1,144,400, respectively, and an increase of 5.0 total workyears. The increase in Salaries and Expenses and total workyears reflects greater emphasis on Total Exposure Assessment Methodology (TEAM) and hazardous air pollution research, both of which are conducted in-house.

The decrease in Research and Development reflects the fact that research over a number of years has resulted in a considerable body of knowledge on criteria air pollutants, enabling the Agency to reduce the overall level of resources in this area. However, EPA will continue to perform the research necessary to review and revise the ambient air quality standards.

Provide Scientific Support to Develop and Review Primary and Secondary NAAQS. Existing air monitoring systems will be evaluated, improved, and standardized, with emphasis on non-methane organic compounds (NMOCs) and fine particulates. In 1987, an automated cryogenic NMOC monitor will be field tested. Research will also be performed to develop methods for measuring human exposure to criteria pollutants.

Provide Scientific Support to Develop NSPS and SIPs. The precision and accuracy of monitoring methods for measuring criteria air pollutant emissions from stationary sources will be evaluated and improved. Emphasis will be placed on developing a sampling method for PM-10. Reference and equivalent methods will be prepared as appropriate. Quality assurance support will be provided.

Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants. Research to develop, evaluate and standardize monitoring systems for potentially hazardous air pollutants will be accelerated. Ambient methods such as combined mass spectrometry and supercritical fluid chromatography will be evaluated. Additional technical assistance will be provided to the Regions and States. The TEAM will be utilized in the field to assess the human exposures to toxic air pollutants. As part of the IACP, emission rates of carcinogenic and tracer substances will be assessed.

Provide Scientific Support to the Mobile Source Regulatory Program. Evaluation of data collected in previous field studies measuring population exposures to mobile source pollutants will continue. Using these data as reference inputs, improvements will be made to existing human exposure models. Emphasis will be placed on the sensitivity of these models to changes in input parameters and their resulting accuracy.

Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment. Monitoring techniques will be utilized in field studies to measure human exposure to major indoor air pollutants such as radon, NO_2, inhalable particulates, and VOCs. Predictive exposure models will be constructed and evaluated. Emissions from indoor combustion sources, construction materials and consumer products will be characterized so that predictive models of indoor air concentrations of the emitted substances can be developed.

1986 Program

In 1986, the Agency is allocating a total of $17,764,800 supported by 118.2 total workyears for this program, of which $5,918,400 is from the Salaries and Expenses appropriation and $11,846,400 is from the Research and Development appropriation.

In 1986, the program is aimed at the completion of reports on the inhalable particulate network, evaluation of PM-10 regulatory impacts and PM-10 systems evaluations, and an interim report on the status of the visibility network. Research on passive HAP monitors is being expanded. The fuels and additives registry is being continued. Audits of the State and Local Air Monitoring Systems (SLAMS) network are being performed and efforts are being made to improve the accuracy of human exposure models.

1985 Accomplishments

In 1985, the Agency obligated a total of $13,078,000 supported by 115.8 total workyears for this program, of which $6,360,300 was from the Salaries and Expenses appropriation and $6,717,700 was from the Research and Development appropriation.

A final report was submitted on the validation of a manual test method for determination of CO emissions. The results of the five-year air quality study by the Stanford Institute of Mathematics and Statistics were published. Five techniques for monitoring hard-to-quantify toxic chemicals were evaluated. Articles were published on the Denver and Washington, D.C. human exposure field studies.

HEALTH EFFECTS

1987 Program Request

The Agency requests a total of $18,577,600 supported by 133.6 total workyears for this program, of which $8,204,600 will be for the Salaries and Expenses appropriation and $10,373,000 will be for the Research and Development appropriation. This represents an increase of $1,206,400 and a decrease of $3,840,300, respectively, and an increase of 3.0 total workyears. The increase in Salaries and Expenses and workyears reflects enhanced support for the in-house research program and the initiation of studies on indoor air and air toxics. The decrease in Research and Development is due primarily to a reduction of EPA funding for extramural studies on the health effects of criteria pollutants and mobile source emissions. These studies have been conducted for a number of years and have yielded sufficient information to support NAAQS and mobile source standards.

Provide Scientific Support to Develop and Review Primary and Secondary NAAQS. To support the timely revision of criteria documents, human and animal studies will be conducted to assess the effects of both acute and chronic exposures to criteria pollutants. Research will continue on models of respiratory tract deposition and pollutant uptake to enhance the development of extrapolation models. Studies will continue on the respiratory, biochemical, and immunological effects of O_3, SO_2, and particles. The neurobehavioral effects of CO will also be studied. Additional epidemiological studies will be performed to assess the effects of exposure to coal and wood smoke.

Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants. In accordance with the Agency's Air Toxics Strategy, biological test methods will continue to be developed to more rapidly identify those airborne toxics with the greatest potential health risks. Dose-response studies will be conducted to assess the genetic, neurologic, pulmonary, physiological, carcinogenic and mutagenic effects of exposure to potentially hazardous air pollutants. Increased emphasis will be placed on the effects of acute exposures. As part of the IACP, human exposure to atmospheric carcinogens will be evaluated. In addition, genotoxic tier bioassays will be expanded so that the mutagenic, carcinogenic and teratogenic effects of vapor phase mixtures can be assessed. Technical assistance for the Regions and States on air toxics problems will be expanded.

Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment. In conjunction with field studies conducted on major indoor air pollutants, the physiological and biological changes associated with exposure to these indoor pollutants will be evaluated.

1986 Program

In 1986, the Agency is allocating a total of $21,211,500 supported by 130.6 total workyears for this program, of which $6,998,200 is from the Salaries and Expenses appropriation and $14,213,300 is from the Research and Development appropriation.

The 1986 program reflects a reduction in the need for mobile source health effects studies. Resources are being shifted in 1986 from mobile source research to give increased emphasis to determining the health effects associated with toxic air pollutants and other non-criteria compounds.

1985 Accomplishments

In 1985, the Agency obligated a total of $23,929,200 supported by 120.6 total workyears for this program, of which $8,781,300 was from the Salaries and Expenses appropriation and $15,147,900 was from the Research and Development appropriation.

Two clinical studies of pulmonary and immunological effects of oxidants were completed that corroborate previous findings in animals. Epidemiology and toxicology studies of lead were completed, indicating that lead can cause neurobehavioral effects at much lower levels than previously expected.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $7,454,000 supported by 72.5 total workyears for this program, of which $3,940,000 will be for the Salaries and Expenses appropriation and $3,514,000 will be for the Research and Development appropriation. This represents an increase of $143,400 and a decrease of $2,325,000, respectively, and an increase of 1.0 total workyear. The increase in Salaries and Expenses and workyears reflects enhanced support for the in-house research program. The reduction in Research and Development reflects a decreased need for control technology and engineering research on criteria pollutants, resulting from the completion of EPA studies supported in prior years.

Provide Scientific Support to Develop NSPS and SIPs. To assist in regulating criteria air pollutants, engineering research will continue to characterize emission sources, and evaluate the cost-effectiveness, reliability and performance of controls. Within the criteria research program for environmental technology, emphasis will shift from nitrogen oxides to research on ozone precursor formation, such as VOCs. Evaluations of generic control technology and industry-specific studies will be conducted on VOC emissions. NO_x research will evaluate the applicability of combustion modification techniques to industrial and utility boilers. Development will continue on an interactive electrostatic precipitator model for use in controlling particulate matter. For SO_x, pilot tests of conventional spray drying for utility and industrial boilers will continue.

Provide Scientific Support to Develop Regulations for Hazardous Air Pollutants. Efforts to evaluate generic and industry-specific control technologies for high priority sources of potentially hazardous air pollutants will continue. Evaluations of wood stove catalytic converters will be continued. In accordance with the Agency's air toxics strategy, increased emphasis will be placed on assessing the performance of control technologies during periodic upsets, malfunctions and process changes. Additional technical assistance will be provided to the Regions and States on air toxics problems. In support of the IACP, engineering research will be continued on the development and assessment of methods for measuring emissions from wood combustion.

Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment. As part of the Agency's National Radon Mitigation Strategy, techniques developed in 1986 will be further tested and refined in 1987. An evaluation of emissions from indoor combustion sources and construction materials will be continued to assess indoor air concentrations of these emitted substances.

1986 Program

In 1986, the Agency is allocating a total of $9,635,600 supported by 71.5 total workyears for this program, of which $3,796,600 is from the Salaries and Expenses appropriation and $5,839,000 is from the Research and Development appropriation. The 1986 program includes the initiation of a national radon mitigation strategy and expansion of the Agency's air toxics program.

1985 Accomplishments

In 1985, the Agency obligated a total of $8,436,500 supported by 63.7 total workyears for this program, of which $3,538,800 was from the Salaries and Expenses appropriation and $4,897,700 was from the Research and Development appropriation.

Pilot scale testing with fuel oil resulted in using reburning techniques for up to a 75% reduction in NO_x levels. An analysis of HAP emission sources was conducted for the Office of Air and Radiation. Phase I of the radon mitigation program in the Reading Prong was completed, with radon reduction averaging 80% and above in several homes.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests a total of $1,668,400 supported by 12.3 total workyears for this program, of which $668,400 will be for the Salaries and Expenses appropriation and $1,000,000 will be for the Research and Development appropriation. This represents a decrease of $148,100 and $288,800, respectively, and no change in total workyears. These reductions reflect the completion of earlier studies on criteria air pollutants, resulting in a reduced need for research to support revisions to national air quality standards.

Provide Scientific Support to Develop and Review Primary and Secondary NAAQS. To support the review of secondary standards for ozone, research is being conducted to assess the importance of interactions between varying soil moisture levels and O_3 exposure fluctuations on growth and yield responses in major crops. Research to determine the effects of O_3 on crops as influenced by soil moisture stress will continue at several geographical sites, and the results will be incorporated in the economic assessment crop loss models.

1986 Program

In 1986, the Agency is allocating a total of $2,105,300 supported by 12.3 total workyears for this program, of which $816,500 is from the Salaries and Expenses appropriation and $1,288,800 is from the Research and Development appropriation.

In 1986, data collection is being completed and statistical analysis is being initiated for the National Crop Loss Assessment Network (NCLAN).

1985 Accomplishments

In 1985, the Agency obligated a total of $4,871,400 supported by 28.8 total workyears for this program, of which $1,713,800 was from the Salaries and Expenses appropriation and $3,157,600 was from the Research and Development appropriation.

In 1985, the Annual Report on NCLAN activities was prepared.

STRATOSPHERIC MODIFICATION

1987 Program Request

The Agency requests a total of $895,000 for this program, all of which is for the Research and Development appropriation. This represents an increase of $93,200 in Research and Development funds, reflecting an increased emphasis on research pertaining to the effects of UV-B radiation on health and welfare.

Provide Scientific Data to Determine the Impact of the Quality of Global and Micro-environments on Public Health and the Environment. In response to increased emphasis on the global impacts of pollution, efforts to assess the health and environmental effects of UV-B radiation will be continued. Studies will be conducted to better quantify UV-B effects on marine and terrestrial ecosystem components after completion of similar studies on several major crops. Work will continue on health effects and on various control approaches for use in potential regulatory actions.

1986 Program

In 1986, the Agency is allocating a total of $801,800 for this program, all of which is from the Research and Development appropriation.

Studies are being initiated to determine the effects of UV-B radiation on human health and welfare, with emphasis on the effect of UV-B on wheat and other crops.

1985 Accomplishments

In 1985, the Agency obligated a total of $804,700 supported by 2.1 total workyears for this program, of which $104,900 was from the Salaries and Expenses appropriation and $699,800 was from the Research and Development appropriation.

A journal article was published on the response of estuarine diatom assemblages to UV-B radiation.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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AIR

Air Quality & Stationary Source Planning & Standards

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Emission Standards & Technology Assessment								
Salaries & Expenses		$4,690.1	$4,624.4	$5,898.1	-$253.5	$5,644.6	$5,101.5	-$543.1
Abatement Control and Compliance		$7,229.1	$7,597.3	$10,797.3	-$464.3	$10,333.0	$8,243.3	-$2,089.7
	TOTAL	$11,919.2	$12,221.7	$16,695.4	-$717.8	$15,977.6	$13,344.8	-$2,632.8
Pollutant Strategies & Air Standards Development								
Salaries & Expenses		$3,864.1	$3,929.0	$5,610.9	-$241.4	$5,369.5	$4,164.4	-$1,205.1
Abatement Control and Compliance		$2,824.4	$2,377.0	$2,377.0	-$102.2	$2,274.8	$3,107.0	$832.2
	TOTAL	$6,688.5	$6,306.0	$7,987.9	-$343.6	$7,644.3	$7,271.4	-$372.9
State Program Policy Guidelines & Regulations Development								
Salaries & Expenses		$2,187.0	$2,265.4	$2,265.4	-$97.5	$2,167.9	$2,265.4	$97.5
Abatement Control and Compliance		$423.6	$524.5	$524.5	-$22.5	$502.0	$505.7	$3.7
	TOTAL	$2,610.6	$2,789.9	$2,789.9	-$120.0	$2,669.9	$2,771.1	$101.2
TOTAL:								
Salaries & Expenses		$10,741.2	$10,818.8	$13,774.4	-$592.4	$13,182.0	$11,531.3	-$1,650.7
Abatement Control and Compliance		$10,477.1	$10,498.8	$13,698.9	-$589.0	$13,109.8	$11,856.0	-$1,253.8
Air Quality & Stationary Source Planning & Standards	TOTAL	$21,218.3	$21,317.6	$27,473.2	-$1,181.4	$26,291.8	$23,387.3	-$2,904.5

AIR

Air Quality & Stationary Source Planning & Standards

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Emission Standards & Technology Assessment	94.2	89.7	128.7		128.7	98.7	-30.0
Pollutant Strategies & Air Standards Development	74.6	81.8	98.8		98.8	87.8	-11.0
State Program Policy Guidelines & Regulations Development	44.6	40.1	40.1		40.1	40.1	
TOTAL PERMANENT WORKYEARS	213.4	211.6	267.6		267.6	226.6	-41.0
TOTAL WORKYEARS							
Emission Standards & Technology Assessment	98.9	96.5	135.5		135.5	105.5	-30.0
Pollutant Strategies & Air Standards Development	80.3	85.4	102.4		102.4	91.4	-11.0
State Program Policy Guidelines & Regulations Development	47.6	45.9	45.9		45.9	45.9	
TOTAL WORKYEARS	226.8	227.8	283.8		283.8	242.8	-41.0

AIR

Air Quality and Stationary Source Planning and Standards

Budget Request

The Agency requests a total of $23,387,300 supported by 242.8 total workyears for 1987, a decrease of $2,904,500 and 41.0 total workyears from 1986. Of the request, $11,531,300 will be for the Salaries and Expenses appropriation and $11,856,000 will be for the Abatement, Control and Compliance appropriation, decreases of $1,650,700 and $1,253,800, respectively.

Program Description

The program areas under this subactivity include:

Emission Standards and Technology Assessment -- This program provides for the establishment, review, and revision of national emission standards for stationary sources under Sections 111 and 112 of the Clean Air Act. Section 111 requires EPA to establish New Source Performance Standards (NSPSs). Section 112 authorizes National Emission Standards for Hazardous Air Pollutants (NESHAPs).

NSPSs reflect the performance of the best control systems for reducing emissions. The standards are set taking into consideration technical feasibility, and cost, as well as economic, energy, and environmental impacts. The background information published as part of the process for setting NSPSs provides useful data to State agencies in defining best available control technology, when such determinations of appropriate control levels must be made under other sections of the Clean Air Act.

NESHAPs protect the public from pollutants that cause or contribute to air pollution that results in an increase in mortality or an increase in serious illness.

Pollutant Strategies and Air Standards Development -- The major activities of this program include: (1) regular review and revision, as appropriate, of all existing National Ambient Air Quality Standards (NAAQSs); (2) identification and assessment of potential hazardous air pollutants, including the determination as to the appropriateness of a listing under Section 112 of the Clean Air Act; and (3) the overall coordination, development, and review of air policies and strategies including work on emerging issues such as acid deposition and stratospheric ozone depletion.

State Program Policy Guidelines and Regulations Development -- This program includes: (1) development of guidelines and regulations that set forth requirements for air pollution control programs implemented by the States under the Clean Air Act; and (2) overview of the development and implementation of State and local air pollution control programs. The State and local programs provide for the attainment and maintenance of NAAQSs, prevention of significant deterioration of air quality in clean areas, and the protection of visibility in national parks and wilderness areas. The overview carried out under this program helps ensure consistency among EPA Regional Offices, States, and local agencies in carrying out the requirements of the Clean Air Act.

EMISSION STANDARDS AND TECHNOLOGY ASSESSMENT

1987 Program Request

The Agency requests a total of $13,344,800 supported by 105.5 total workyears for this program, of which $5,101,500 will be for the Salaries and Expenses appropriation and $8,243,300 will be for the Abatement, Control and Compliance appropriation. This represents decreases of $543,100 and $2,089,700, respectively, and 30.0 total workyears. These decreases reflect anticipated completion of a one year effort in FY 1986 to accelerate the NSPS process.

The major program emphasis in 1987 will be reducing emissions from sources of hazardous air pollutants. This includes source assessments to support section 112 listing decisions for potentially hazardous pollutants and development of NESHAPs. During 1987, NESHAPs promulgations include two new NESHAPs for benzene (coke oven by-product plants) and coke oven emissions (wet charging and topside leaks). A revised standard for asbestos (demolition and renovation) will be proposed. Continued NESHAPs work includes further development of new standards for sources of chromium, cadmium, butadiene, carbon tetrachloride, perchloroethylene, methylene chloride, chloroform, ethylene oxide, ethylene dichloride, trichloroethylene, and three new hazardous air pollutants for which decisions are expected in 1986. The program will also continue to provide implementation support to States as part of the Agency's air toxics strategy whereby decisions on the control of selected air pollutants will be made by individual States rather than through Federal NESHAPs.

In 1987, efforts are continuing to complete NSPSs for all source categories required by the Clean Air Act. Promulgations of 15 NSPSs (12 new standards; three revisions) covering 12 additional priority list source categories are scheduled in 1987. One new NSPS is scheduled for proposal. Developmental work will continue on three NSPSs.

1986 Program

In 1986, the Agency is allocating a total of $15,977,600 supported by 135.5 total workyears to this program, of which $5,644,600 is from the Salaries and Expenses appropriation and $10,333,000 is from the Abatement, Control and Compliance appropriation.

In 1986, NSPS development is continuing. Proposals for 14 NSPSs (12 new standards; two revisions) and promulgation of 10 NSPSs (six new standards; four revisions) are scheduled for 1986 covering six additional priority list source categories. In addition, three NSPS reviews are being completed. Other activity includes the completion of auto surface coating and size-specific particulate matter (PM_{10}) assessments and two Control Technology Documents (lead and volatile organic compounds) and work on the remaining NSPS source categories on the priority list.

Proposal of one NESHAP for coke oven emissions (wet charging and topside leaks) is scheduled in 1986. Five NESHAPs, one for arsenic glass manufacturing, one for low arsenic feedstock copper smelters, one for high arsenic feedstock copper smelters, and revisions to the NESHAPs for vinyl chloride and mercury are scheduled for promulgation. Source assessments for several compounds are also being completed to support listing decisions in 1986. Ongoing NESHAPs development includes standards for sources of chromium, asbestos, benzene (coke by-product plants), cadmium, butadiene, carbon tetrachloride, perchloroethylene, ethylene oxide, ethylene dichloride, trichloroethylene, methylene chloride, and chloroform. The program will also provide implementation support to States to ensure adequate control of selected toxic air pollutants/source categories.

1985 Accomplishments

In 1985, the Agency obligated a total of $11,919,200 supported by 98.9 total workyears, of which $4,690,100 was from the Salaries and Expenses appropriation and $7,229,100 was from the Abatement, Control and Compliance appropriation. The contract resources were used to continue work related to setting NSPSs and NESHAPs.

In 1985, work continued on setting NSPSs for source categories on EPA's priority list. NSPS activity included: proposal of three NSPS revisions; promulgation of six new standards covering six additional priority list source categories; revisions to five NSPSs; and completion of three reviews of existing NSPSs. Also, a Control Technique Guideline was completed for air oxidation.

Work continued toward promulgation of NESHAPs for three sources of arsenic. Work also continued on NESHAPs proposals including coke ovens (wet charging and topside leaks), and revision to the NESHAPs for asbestos demolition and renovation. Revisions to the NESHAPs for mercury and vinyl chloride were proposed in 1985. Other NESHAPs activity included continuing standard development work on benzene (coke by-product plants), and new work on cadmium, chromium, butadiene, and carbon tetrachloride. In addition, source assessments for five chemical compounds were completed.

POLLUTANT STRATEGIES AND AIR STANDARDS DEVELOPMENT

1987 Program Request

The Agency requests a total of $7,271,400 supported by 91.4 total workyears for this program, of which $4,164,400 will be for the Salaries and Expenses appropriation and $3,107,000 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $1,205,100 and an increase of $832,200 respectively, and a decrease of 11.0 total workyears. The additional contract funds will provide for guidance documents and workshops in support of the State air toxics programs. The decreases reflect a more streamlined approach to providing direct Federal support to State and local agencies.

Promulgation of a revised particulate matter NAAQS is planned for 1987. Also, in 1987, a NAAQS revision or reaffirmation for lead is planned to be proposed and a revised or reaffirmed NAAQS for sulfur dioxide is expected to be promulgated. The development of regulatory impact analyses for ozone will be completed and the development of a fine particle secondary NAAQS will be underway. The next round of reviews for carbon monoxide and nitrogen dioxide will begin. Regulatory decisions will be made for 8-12 potential hazardous pollutants. Involvement in air toxics activities will continue. This includes support for the implementation of the National Air Toxics Strategy, operation of the Air Toxics Clearinghouse to support State programs, conducting workshops, providing information on health, exposure and risk assessment, and support to ensure adequate control of localized air toxics problems that may not be suitable for a national regulatory program. Other activities include (1) continued analyses of acid rain policy and implementation issues; and (2) decisions on the actions needed to control chlorofluorocarbon (CFC) emissions.

1986 Program

In 1986, the Agency is allocating a total of $7,644,300 supported by 102.4 total workyears for this program. Of this amount, $5,369,500 is from the Salaries and Expenses appropriation and $2,274,800 is from the Abatement, Control and Compliance appropriation.

Revision or reaffirmation of the NAAQS for sulfur dioxide is expected to be proposed in 1986. Reviews of the NAAQS for particulate matter, lead, and ozone are underway. Pollutant assessment activities are to result in regulatory decisions for 13 substances. Work is continuing on a number of other pollutants scheduled for regulatory decisions in 1987. Other activities include: implementation of the Air Toxics Clearinghouse; health, exposure, risk, and source prioritization support for the NESHAPs program; a report on nationally important candidates for the direct Federal regulatory program; and support to State and local programs on air toxics problems.

Work is continuing on acid rain policy and implementation issues and exploration of the magnitude of the CFC problem.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,688,500 supported by 80.3 total workyears, of which $3,864,100 was from the Salaries and Expenses appropriation and $2,824,400 was from the Abatement, Control, and Compliance appropriation.

Reviews of the NAAQSs for carbon monoxide and nitrogen dioxide were promulgated in 1985 and work was underway to propose appropriate revisions to the NAAQSs for sulfur dioxide, lead, and ozone. In addition, work continued toward final action on review of the NAAQS for particulate matter. In the pollutant assessment area, work continued on the health and risk assessment of potentially toxic air pollutants to determine the need for regulations. Listing decisions were published for 11 compounds in 1985. Other activities included the initiation of full operation of the Air Toxics Clearinghouse. In addition, the National Air Toxics Strategy was announced and initial implementation begun. Work continued on acid rain policy and implementation issues and a comprehensive CFC action strategy was developed and adopted.

STATE PROGRAM POLICY GUIDELINES AND REGULATIONS DEVELOPMENT

1987 Program Request

The Agency requests a total of $2,771,100 supported by 45.9 total workyears for this program, of which $2,265,400 will be for the Salaries and Expenses appropriation and $505,700 will be for the Abatement, Control and Compliance appropriation. This represents increases of $97,500 and $3,700, respectively, and no change in total workyears. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

In 1987, the program will continue to provide national direction, management, and assistance to the national air quality management effort. The program will also develop regulations, policies, and technical guidance to support the implementation of revised NAAQSs for lead and sulfur dioxide, as well as for a variety of other critical issues such as stack heights and PM_{10}. Regulatory actions are expected to include promulgation of regulations associated with revised or reaffirmed NAAQSs for particulate matter and sulfur dioxide. Revised National Air Audit criteria will be provided to the Regions for their use in conducting State and local agency audits at the biennual frequency initiated in 1986. A national audit report will be published. Management of the new source review and prevention of significant deterioration programs will also continue. This will encompass technical analysis and support of litigation including promulgation of visibility Part II regulations and rulemaking on ship emissions. In addition, management of the State Implementation Plan (SIP) process will continue, together with the management and overview of the post 1982 attainment program and additional emphasis on areas not likely to meet the 1987 attainment date for ozone. The operation of the control strategies clearinghouse for volatile organic compounds will be continued. A program to provide implementation guidance of the multi-year air toxics plan will continue.

1986 Program

In 1986, the Agency is allocating a total of $2,669,900 supported by 45.9 total workyears for this program, of which $2,167,900 is from the Salaries and Expenses appropriation and $502,000 is from the Abatement, Control and Compliance appropriation.

In 1986, regulations to implement SIP requirements for a revised or reaffirmed sulfur dioxide NAAQS are expected to be proposed. Program guidance, policy papers, and technical information are also being developed on a variety of issues including SIP revisions for post 1982/1987 attainment, sulfur dioxide, stack heights, PM_{10} implementation, and visibility. The new source review program is continuing to provide permit assistance and litigation support. Other rulemaking activities include the proposal of visibility Part II and vessel emissions regulations and promulgation of fugitive emissions regulations and the listing of strip mines. Guidance and assistance is also being provided to the Regional Offices in SIP management. Technical analysis of volatile organic compound controls, particulates, sulfur dioxide, lead, and other critical issues is being provided. The National Air Audit System is being continued in order to provide effective evaluation and review of State air programs, with audits shifting from an annual to biennual frequency. Acid rain implementation options are being evaluated and guidance provided on selected issues. Guidance is being provided to improve State and local toxics program capability consistent with the national air toxics strategy.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,610,600 supported by 47.6 total workyears for this program, of which $2,187,000 was from the Salaries and Expenses appropriation and $423,600 was from the Abatement, Control and Compliance appropriation.

National management and evaluation of all major SIP programs continued in 1985. Program guidance, policy papers, and technical information were developed on a variety of issues including post-1982/87 attainment, lead, PM_{10}, and sulfur dioxide. Policy guidance and program assistance were continued for the areas that had been granted attainment date extensions for the ozone and carbon monoxide NAAQSs. Lead SIPs were developed in accordance with the schedule and requirements of the litigation settlement agreement. Rulemaking accomplishments included proposal of regulations to implement revised particulate matter NAAQSs; proposal and promulgation of stack heights regulations; proposal and promulgation of Part I visibility regulations; proposal of prevention of significant deterioration regulations listing strip mines; proposal of fugitive emissions rulemaking; and promulgation of regulations to resolve the Section 126 petitions. New source review program guidance was provided and the National Air Audit System was implemented for five program areas (air quality planning, new source review, compliance assurance, air monitoring, and vehicle inspection/maintenance). Revised National Air Audit criteria were developed and a national air audit report was prepared.

AIR

Mobile Source Air Pollution Control & Fuel Economy

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Emission Standards, Technical Assessment & Characterization								
Salaries & Expenses		$3,512.2	$3,592.3	$3,804.5	-$163.6	$3,640.9	$3,989.3	$348.4
Abatement Control and Compliance		$2,009.3	$2,817.6	$4,217.6	-$181.3	$4,036.3	$3,436.4	-$599.9
	TOTAL	$5,521.5	$6,409.9	$8,022.1	-$344.9	$7,677.2	$7,425.7	-$251.5
Testing, Technical & Administrative Support								
Salaries & Expenses		$5,408.2	$4,885.3	$4,926.6	-$211.9	$4,714.7	$4,861.6	$146.9
Abatement Control and Compliance		$900.0	$900.0	$900.0	-$38.7	$861.3	$900.0	$38.7
	TOTAL	$6,308.2	$5,785.3	$5,826.6	-$250.6	$5,576.0	$5,761.6	$185.6
Emissions & Fuel Economy Compliance								
Salaries & Expenses		$1,640.7	$1,600.8	$1,633.3	-$70.0	$1,563.3	$1,600.3	$37.0
Abatement Control and Compliance		$35.0	$35.0	$35.0	-$1.5	$33.5	$35.0	$1.5
	TOTAL	$1,675.7	$1,635.8	$1,668.3	-$71.5	$1,596.8	$1,635.3	$38.5
TOTAL:								
Salaries & Expenses		$10,561.1	$10,078.4	$10,364.4	-$445.5	$9,918.9	$10,451.2	$532.3
Abatement Control and Compliance		$2,944.3	$3,752.6	$5,152.6	-$221.5	$4,931.1	$4,371.4	-$559.7
Mobile Source Air Pollution Control & Fuel Economy	TOTAL	$13,505.4	$13,831.0	$15,517.0	-$667.0	$14,850.0	$14,822.6	-$27.4

AIR

Mobile Source Air Pollution Control & Fuel Economy

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Emission Standards, Technical Assessment & Characterization	65.3	63.9	70.4		70.4	69.9	-0.5
Testing, Technical & Administrative Support	89.6	92.0	94.0		94.0	92.0	-2.0
Emissions & Fuel Economy Compliance	32.0	33.0	34.0		34.0	33.0	-1.0
TOTAL PERMANENT WORKYEARS	186.9	188.9	198.4		198.4	194.9	-3.5
TOTAL WORKYEARS							
Emission Standards, Technical Assessment & Characterization	71.8	71.9	78.4		78.4	77.9	-0.5
Testing, Technical & Administrative Support	93.1	93.6	95.6		95.6	93.6	-2.0
Emissions & Fuel Economy Compliance	33.0	33.3	34.3		34.3	33.3	-1.0
TOTAL WORKYEARS	197.9	198.8	208.3		208.3	204.8	-3.5

AIR

Mobile Source Air Pollution Control and Fuel Economy

Budget Request

The Agency requests a total of $14,822,600 supported by 204.8 total workyears for 1987, a decrease of $27,400 and 3.5 total workyears from 1986. Of the request $10,451,200 will be for the Salaries and Expenses appropriation and $4,371,400 will be for the Abatement, Control and Compliance appropriation, an increase of $532,300 and a decrease of $559,700, respectively.

Program Description

This subactivity includes the following mobile source programs:

Emission Standards, Technical Assessment and Characterization -- This program provides the standards development and analysis required for the control of mobile source emissions, as required by the Clean Air Act. Work is also carried out to improve fuel economy testing procedures and evaluate fuel economy retrofit devices, as required by the Motor Vehicle Information and Cost Savings Act. This program is responsible for developing both light-duty vehicle and heavy-duty engine standards for the control of evaporative and exhaust emissions. Other major program activities include: characterization of toxic emissions, assessment of emissions control technology, technical assistance to the States for implementation of local control programs, assessment of actual emissions levels from in-use vehicles, analysis of the current and prospective impacts of motor vehicle emissions on air quality, and assessment of alternative fuels and technologies as a means of reducing air pollution from mobile sources.

Testing, Technical, and Administrative Support -- This program provides basic testing, technical, and administrative support to the mobile source operating programs of EPA.

Emissions and Fuel Economy Compliance -- This program implements the emissions certification and compliance requirements of the Clean Air Act and the fuel economy information and compliance requirements of the Motor Vehicle Information and Cost Savings Act. As part of this program, fuel economy information is made available to the consumer through the mile per gallon values published in the Gas Mileage Guide and on new vehicle labels.

EMISSION STANDARDS, TECHNICAL ASSESSMENT, AND CHARACTERIZATION

1987 Program Request

The Agency requests a total of $7,425,700 supported by 77.9 total workyears for this program, of which $3,989,300 will be for the Salaries and Expenses appropriation and $3,436,400 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $348,400 for the Salaries and Expenses appropriation, a decrease of $599,900 in the Abatement, Control and Compliance appropriation and a decrease of 0.5 in total workyears. The increase reflects support for in-house activities related to diesel emissions control. The decreases reflect changes in developing controls for toxic air pollutants.

The standards program in 1987 will continue emphasis on controlling ozone precursors and air toxics. The regulatory program will concentrate on control of evaporative and refueling emissions, excess hydrocarbon (HC) emissions, formaldehyde, and particulates. An advance notice for modifying diesel fuel composition will be published. Accelerated work on the fuel and fuel additive test protocols will result in a notice by the end of 1987. With the implementation of lead phasedown, additional work will focus on alternatives to leaded gasoline. Testing of in-use vehicles will continue to assess the emissions performance of the in-use fleet. Data from the testing will be used to refine air quality projections and update the mobile source emissions estimation program. Work will continue on heavy-duty diesel trap technology with the implementation of prototype trap regeneration systems and close monitoring of industry research efforts. Support to the development of State Implementation Plans (SIPs) will continue, especially with respect to Inspection/Maintenance (I/M) programs. A total of 15 formal audits and follow-ups of State and local I/M programs will be completed.

1986 Program

In 1986, the Agency is allocating a total of $7,677,200 supported by 78.4 total workyears for this program, of which $3,640,900 is from the Salaries and Expenses appropriation and $4,036,300 is from the Abatement, Control and Compliance appropriation.

During 1985, the standards for heavy-duty engine nitrogen oxides and particulate emissions were promulgated. Implementation of these technology forcing standards, which contribute to the control of air toxics, is requiring continued support during 1986 to help ensure the development of particulate traps. Work has been started to characterize formaldehyde emissions from catalyst-equipped vehicles. The persistence of a severe ozone problem in many parts of the country spurred activity to deal with the control of excess HC emissions. In addition to the work on evaporative emissions control during refueling which may result in proposing control alternatives, work has also begun on a strategy to control other excess evaporative HC emissions from motor vehicles. A study that may lead to a proposed rulemaking will be completed by the end of 1986. The program continues to provide implementation assistance and review of SIPs, particularly as they relate to I/M. In 1985 and 1986 a process of periodic I/M program audits has continued to assess the effectiveness of State and local I/M programs. Additional work focuses on the testing of in-use vehicles, including the evaluation of new technology vehicles. Characterization of emissions from vehicles powered by alternative fuels continues. Work also continues on a rulemaking which will establish standards and a test procedure for methanol fueled vehicles. Standards for these vehicles will be proposed in 1986. A systematic review of the heavy-duty standards for HC, carbon monoxide and particulate matter will be initiated in 1986 for potential revision in 1987 and beyond.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,521,500 supported by 71.8 total workyears, of which $3,512,200 was from the Salaries and Expenses appropriation and $2,009,300 was from the Abatement, Control and Compliance appropriation.

Standards development resulted in promulgation of technology forcing standards for heavy-duty engine emissions of particulates and nitrogen oxides. Efforts related to heavy-duty engine emissions also included preparation for implementation of standards for evaporative hydrocarbon emissions and standards for exhaust hydrocarbon and carbon monoxide emissions. Support was furnished to States for the I/M portions of SIPs. Audits were completed for 10 I/M programs. Two fuel economy retrofit devices were tested and evaluated.

TESTING, TECHNICAL AND ADMINISTRATIVE SUPPORT

1987 Program Request

The Agency requests a total of $5,761,600 supported by 93.6 total workyears for this program, of which $4,861,600 will be for the Salaries and Expenses appropriation and $900,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $146,900 in the Salaries and Expenses appropriation, an increase of $38,700 in the Abatement, Control and Compliance appropriation and a decrease of 2.0 in total workyears. The decrease in total workyears reflect changes in support provided to the mobile testing program. The increase in the Salaries and Expenses appropriation will fund higher personnel costs. The increase in the Abatement, Control and Compliance appropriation reflects adjustments to the 1986 base as part of government-wide deficit reductions.

This program will provide testing, technical, and administrative support to the operating programs of the Office of Mobile Sources at the EPA Motor Vehicle Emissions Laboratory (MVEL) located in Ann Arbor, Michigan. Approximately 1,000 tests will be performed on prototypes, 1,600 tests on in-use vehicles, and 100 tests on heavy-duty engines. Activities that will be supported include recall, tampering and fuel switching, standard setting, emissions characterization, technology assessment, fuel economy, in-use vehicle emissions assessment, and motor vehicle emission certification. The support that will be provided includes: automated data processing (ADP) timesharing services, laboratory data acquisition, and computer operations; testing of motor vehicles to measure emissions and fuel economy; quality control and correlation services for EPA and industry testing programs; maintenance and engineering design of emission testing equipment; and personnel, administrative, safety, and facilities support services. Testing and analysis of approximately 2,000 fuel samples collected for enforcement purposes will continue.

1986 Program

In 1986, the Agency is allocating a total of $5,576,000 supported by 95.6 total workyears for this program, of which $4,714,700 is from the Salaries and Expenses appropriation and $861,300 is from the Abatement, Control and Compliance appropriation. Testing and technical support activities now operate at a level where significant economies of scale can be obtained.

Testing support to the certification and fuel economy labeling and compliance program continues, with 1,000 tests scheduled for these purposes. An additional 1,840 tests of in-use light-duty vehicles at the MVEL support the following programs: recall, surveillance, tampering and fuel switching, and emission factor development. Testing also includes support for the heavy-duty engine emission factors and standard-setting program. Correlation programs ensure consistency among EPA and manufacturer test facilities. Personnel, facility support services, safety, ADP, and administrative management functions are provided for at the MVEL.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,308,200 supported by 93.1 total workyears for this program, of which $5,408,200 was from the Salaries and Expenses appropriation and $900,000 was from the Abatement, Control and Compliance appropriation.

During 1985, the program continued to increase testing and vehicle procurement at the MVEL. A total of 2,637 tests were performed at the laboratory during the year. Test results were used by all mobile source programs to support regulatory and enforcement activities.

EMISSIONS AND FUEL ECONOMY COMPLIANCE

1987 Program Request

The Agency requests a total of $1,635,300 supported by 33.3 workyears for this program, of which $1,600,300 will be for the Salaries and Expenses appropriation and $35,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $37,000 in the Salaries and Expenses appropriation, an increase of $1,500 in the Abatement, Control and Compliance appropriation and a decrease of 1.0 in total workyears. The workyear decrease is related to reductions in work assessing the adequacy of certification requirements to ensure durable emission control systems. The increases reflect adjustments to the 1986 base as part of government-wide deficit reductions.

The emissions and fuel economy compliance program will continue to issue approximately 600 certificates of compliance during the year. Certification engineering review will continue to deter the production of vehicle designs not capable of meeting emission standards. Participation in the certification program by importers for resale is expected to continue to increase. The fuel economy information and compliance program will generate information for the Gas Mileage Guide, calculate fuel economy labels, and calculate each manufacturer's Corporate Average Fuel Economy (CAFE). The in-use technology assessment program will continue the examination of continuing durability of control technology at high mileage. The objective is to improve the effectiveness of the certification program in reducing high mileage in-use noncompliance.

1986 Program

In 1986, the Agency is allocating a total of $1,596,800 supported by 34.3 total workyears for this program, of which $1,563,300 is from the Salaries and Expenses appropriation and $33,500 is from the Abatement, Control and Compliance appropriation.

Approximately 600 certificates of compliance with emission standards will be issued. The Agency is continuing to streamline the certification process by revising requirements to reduce the burden on industry without sacrificing emissions reductions. Programs to assess the performance of high mileage in-use vehicles in order to develop improved ways to assure high-mileage compliance with standards are underway. The fuel economy program continues to generate 1,000 to 1,100 fuel economy labels a year, data for the Gas Mileage Guide, and 50 CAFE calculations.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,675,700 supported by 33.0 total workyears for this program, of which $1,640,700 was from the Salaries and Expenses appropriation and $35,000 was from the Abatement, Control and Compliance appropriation.

Certificates of compliance were issued for 592 engine families. The fuel economy program produced 1,151 fuel economy labels and performed 78 CAFE calculations. Increased effort was devoted to revise the fuel economy program to more closely approximate in-use results, improve the labeling data base, and reduce the manufacturers' reporting costs.

AIR

State Programs Resource Assistance

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Control Agency Resource Supplementation (Section 105 Grants)								
Abatement Control and Compliance		$90,486.0	$95,034.0	$100,034.0	-$4,301.5	$95,732.5	$95,000.0	-$732.5
	TOTAL	$90,486.0	$95,034.0	$100,034.0	-$4,301.5	$95,732.5	$95,000.0	-$732.5
Training								
Salaries & Expenses		$230.6	$234.5	$234.5	-$10.2	$224.3	$234.5	$10.2
Abatement Control and Compliance		$507.0		$500.0	-$21.5	$478.5		-$478.5
	TOTAL	$737.6	$234.5	$734.5	-$31.7	$702.8	$234.5	-$468.3
TOTAL:								
Salaries & Expenses		$230.6	$234.5	$234.5	-$10.2	$224.3	$234.5	$10.2
Abatement Control and Compliance		$90,993.0	$95,034.0	$100,534.0	-$4,323.0	$96,211.0	$95,000.0	-$1,211.0
State Programs Resource Assistance	TOTAL	$91,223.6	$95,268.5	$100,768.5	-$4,333.2	$96,435.3	$95,234.5	-$1,200.8
PERMANENT WORKYEARS								
Training		4.0	4.0	4.0		4.0	4.0	
TOTAL PERMANENT WORKYEARS		4.0	4.0	4.0		4.0	4.0	

AIR

State Programs Resource Assistance

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Training	4.0	4.0	4.0		4.0	4.0	
TOTAL WORKYEARS	4.0	4.0	4.0		4.0	4.0	

AIR

State Programs Resource Assistance

Budget Request

The Agency requests a total of $95,234,500 supported by 4.0 total workyears for 1987, a decrease of $1,200,800 and no change in total workyears from 1986. Of the request, $234,500 will be for the Salaries and Expenses appropriation and $95,000,000 will be for the Abatement, Control and Compliance appropriation, representing an increase of $10,200 in the Salaries and Expense appropriation and a decrease of $1,211,000 in the Abatement, Control and Compliance appropriation.

Program Description

This subactivity provides financial support to State and local air pollution control agencies, including air quality programs for Indian lands, for the prevention, abatement, and control of air pollution. The primary objective of this subactivity is to support the development and implementation of effective State and local programs for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQSs), in accordance with provisions of the Clean Air Act.

Control Agency Resource Supplementation (Section 105 Grants) -- Direct grants to control agencies that have major roles in developing and carrying out programs under the Clean Air Act constitute the major form of EPA resource assistance. Direct grants are supplemented by the training of State and local air pollution control personnel and the provision of services of contractors for specific tasks identified by the States and localities. The grants support State and local activities which develop State Implementation Plans (SIPs) for the attainment and maintenance of the NAAQSs; enforce source emission regulations and requirements contained within the SIPs; review and permit new sources; monitor ambient air quality for assessing environmental quality and progress; and develop data bases necessary for regulatory decisions. In addition, these funds promote the assumption and implementation of other Clean Air Act responsibilities, including those for the prevention of significant deterioration (PSD), protection of visibility and the implementation of New Source Performance Standards (NSPSs) and National Emission Standards for Hazardous Air Pollutants (NESHAPs). Finally, these funds help control agencies to develop and enhance air toxics programs for assessing and mitigating exposures consistent with the recently published national strategy.

Training -- Traditionally, resource assistance is further supplemented by the provision of training in specialized areas of air pollution control. New courses are developed as needed, instruction manuals and materials are revised and updated, and manuals and instructional materials are provided to university training centers. The EPA staff works with university centers to develop State and local self-sufficiency in training by offering courses at area training centers.

CONTROL AGENCY RESOURCE SUPPLEMENTATION (SECTION 105 GRANTS)

1987 Program Request

The Agency requests a total of $95,000,000, all of which will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $732,500. This decrease reflects completion of the acid precipitation emissions inventory project.

This grant will be included in an anticipated legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs. In 1987, States are expected to continue to emphasize the following activities. States will implement inspection and source compliance programs, continuing to emphasize NESHAPs and Class B volatile organic compound (VOC) sources in nonattainment areas. States will maintain the National Air Monitoring System (NAMS) and State and Local Air Monitoring System (SLAMS) networks, replacing additional poor instruments and continuing necessary modifications to collect sizespecific particulate matter (PM_{10}) data. States will initiate efforts for developing PM_{10} SIPs in high probability nonattainment areas.

Implementation of the national air toxics strategy will continue to be a major priority for State and local air programs in 1987. State and local agencies will continue to implement their multiple-year plans, building and expanding air toxics programs consistent with the national strategy and EPA guidance. State and local agencies will continue to undertake initiatives to evaluate and mitigate exposures from high risk sources. Concerns about air toxics exposures in urban areas having multiple sources and pollutants will continue to grow. Programs to start evaluating and addressing these concerns will commence in several areas in 1987. States will initiate the first phase of a several year program to prepare comprehensive inventories and analyze exposure within complex geographic areas expected to have significant multiple source and pollutant interactions. Grant resources will also permit States to implement a comprehensive program in urban ozone nonattainment areas which are not anticipated to attain by 1987. Efforts to assess controls, adopt new and increasingly stringent control measures, and review the reductions achieved will ensure that effective progress in reducing VOC emissions continues in these areas. States will start to develop and implement the corrective and/or additional measures necessary to achieve major progress.

1986 Program

In 1986, the Agency is allocating a total of $95,732,500 for this program, all of which is from the Abatement, Control and Compliance appropriation.

In 1986, States are continuing to develop and implement the multiple regulatory programs necessary for the attainment of NAAQSs in areas missing the 1982 deadlines or having extensions to 1987. States are also preparing necessary corrections to the SIPs where State/EPA reviews of progress identify needed changes in attainment strategies or new nonattainment problems are documented. States are preparing data bases and analyses preparatory to the development of regulatory plans for PM_{10} when the NAAQS is promulgated. Revisions to SIPs addressing EPA's revised stack height regulations are being developed. States are also assuming responsibility for newly promulgated NSPSs and NESHAPs.

States are continuing to fully operate and quality assure the NAMS/SLAMS networks. A number of the more seriously deteriorated network monitors for ozone and carbon monoxide are being replaced. States are continuing to modify existing networks to collect data necessary for regulatory decisions and the development of required PM_{10} SIPs, including the purchase of additional monitoring equipment for determining PM_{10} levels in probable nonattainment areas. Instrumentation is being purchased for conducting limited background visibility monitoring in key Class I areas as required by settlement of litigation against the Agency.

States are carrying out their inspection and source monitoring programs for assuring initial and continuous compliance by stationary sources, including the provision of timely and appropriate response to violations. Emphasis continues to focus on violating VOC sources and sources subject to NESHAPs, including enforcement of asbestos demolition and renovation requirements and inventories of Class B sources. Grant resources are also supporting the implementation of ongoing in-use vehicle regulatory programs and the development of a limited number of new programs in nonattainment areas.

State and local agencies are preparing multiple-year plans to build and enhance air toxics programs, consistent with the national air toxics strategy, and are initiating programs to implement these plans. They are also initating steps to evaluate and mitigate exposures from certain high risk sources identified by EPA or the State.

Specific projects to analyze and develop data bases and improve State inventories as well as technical and institutional foundations for possible future acid rain control strategies are continuing.

1985 Accomplishments

In 1985, the Agency obligated a total of $90,486,000 to this program, all of which was from the Abatement, Control and Compliance appropriation.

In 1985, air management efforts included analysis of the SIPs for areas missing the December 1982 NAAQS attainment deadline; development and adoption of additional regulations and programs in areas having extensions to 1987 for meeting the carbon monoxide and ozone NAAQSs; and continued development of overdue SIPs for lead.

States continued the operation and quality assurance of the NAMS and SLAMS networks. Selected States initiated programs to develop technical and institutional foundations for possible future acid rain control strategies, including improvement of data bases and evaluation of control options.

State compliance programs continued to focus efforts on assuring initial and continuous compliance by stationary sources through improved inspection techniques and continuous monitoring activities. Emphasis was placed on violating sources of VOCs and sources subject to NESHAPs. States also negotiated and implemented efforts to improve the Federal/State enforcement process described in their cooperative agreements with EPA in defining "timely and appropriate" response to violating sources.

TRAINING

1987 Program Request

The Agency requests a total of $234,500 supported by 4.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This request represents an increase of $10,200 in the Salaries and Expenses appropriation and a decrease of $478,500 in the Abatement, Control and Compliance appropriation. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. This decrease reflects the Agency's decision that States are capable of providing sufficient training in the basic aspects of air pollution control.

In 1987, EPA will continue to manage the self-study training program. Technical support will be provided to States and Regions planning workshops and training courses. In addition, existing courses will be updated using in-house skills.

1986 Program

In 1986, the Agency is allocating a total of $702,800 supported by 4.0 total workyears for this program. Of this request, $224,300 is from the Salaries and Expenses appropriation and $478,500 is from the Abatement, Control and Compliance appropriation.

Activities in 1986 include management of the self-study training program, technical support to States and Regions planning workshops and training courses, and updating of existing courses using in-house skills. Also, training courses will be offered in the six area training centers covering high demand subject areas and traineeships/ fellowships will be provided to selected control agency employees.

1985 Accomplishments

In 1985, the Agency obligated a total of $737,600 supported by 4.0 total workyears for this program. Of the amount obligated, $230,600 was from the Salaries and Expenses appropriation and $507,000 was from the Abatement, Control and Compliance appropriation.

In 1985, a total of 43 training courses (28 regular scheduled courses and 15 special courses) were conducted covering 17 subject areas for 1007 students at six area training centers and in Regional areas. Graduate traineeships or fellowships were provided for 19 control agency employees. In addition, three new courses in the area of air toxics were prepared. Also, revised self-instructional correspondence and classroom courses were prepared and made available to 1130 students.

AIR

Air Quality Management Implementation

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Air Quality Management Implementation							
Salaries & Expenses	$10,852.4	$11,780.8	$12,145.2	-$522.2	$11,623.0	$11,955.2	$332.2
Abatement Control and Compliance	$300.2	$294.6	$694.6	-$29.9	$664.7	$294.6	-$370.1
TOTAL	$11,152.6	$12,075.4	$12,839.8	-$552.1	$12,287.7	$12,249.8	-$37.9
TOTAL:							
Salaries & Expenses	$10,852.4	$11,780.8	$12,145.2	-$522.2	$11,623.0	$11,955.2	$332.2
Abatement Control and Compliance	$300.2	$294.6	$694.6	-$29.9	$664.7	$294.6	-$370.1
Air Quality Management Implementation TOTAL	$11,152.6	$12,075.4	$12,839.8	-$552.1	$12,287.7	$12,249.8	-$37.9
PERMANENT WORKYEARS							
Air Quality Management Implementation	263.7	275.2	281.0		281.0	275.0	-6.0
TOTAL PERMANENT WORKYEARS	263.7	275.2	281.0		281.0	275.0	-6.0

AIR

Air Quality Management Implementation

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Air Quality Management Implementation	284.9	294.4	304.3		304.3	298.3	-6.0
TOTAL WORKYEARS	284.9	294.4	304.3		304.3	298.3	-6.0

AIR

Air Quality Management Implementation

Budget Request

The Agency requests a total of $12,249,800 supported by 298.3 total workyears for 1987, a decrease of $37,900 and 6.0 total workyears. Of the request, $11,955,200 will be for the Salaries and Expenses appropriation and $294,600 will be for the Abatement, Control and Compliance appropriation, an increase of $332,200 and a decrease of $370,100, respectively.

Program Description

This subactivity provides resources for the operation and maintenance of an air quality management program in each of the Agency's ten Regional Offices. Under the Clean Air Act, the States have primary responsibility for preparing attainment strategies and meeting the commitments for the development and implementation of multiple regulatory programs essential to the attainment and maintenance of National Ambient Air Quality Standards (NAAQSs). State strategies and programs have to be revised when NAAQSs are modified, new standards established, or deficiencies within the strategies are identified. The Regional program, in partnership with State and local air pollution control agencies, has a major responsibility for implementing the requirements of the Clean Air Act and related EPA regulations governing the attainment and maintenance of the NAAQSs. The air management program provides policy guidance and technical consultation to States, helping them to prepare the strategies and regulatory programs. The program also conducts the necessary regulatory review and coordination for approval within the Federal Register of individual strategies and regulations in State Implementation Plans (SIPs) submitted to EPA. The program also plays the principal role in negotiating air quality program grants to State and local control agencies and auditing the progress and effectiveness of these agencies in developing, implementing, and enforcing regulatory programs. The program has major responsibilities for helping States develop and implement programs for assessing and mitigating air toxics exposures as required by the Agency's recently published national strategy.

AIR QUALITY MANAGEMENT IMPLEMENTATION

1987 Program Request

The Agency requests a total of $12,249,800 supported by 298.3 total workyears for this program, of which $11,955,200 will be for the Salaries and Expenses appropriation and $294,600 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $332,200 and a decrease of $370,100, respectively, and a decrease of 6.0 total workyears. The increase reflects increased operationg costs for the program. The decreases reflect completion of the guidance for tall stack and lead SIP revisions, as well as completion of sitespecific integrated environmental pilot studies carried out in 1986.

The Regional air management program will continue efforts to restore environmental quality, particularly the protection of public health within the remaining nonattainment areas. Nonattainment efforts will focus on the most severe ozone areas which have the largest sensitive populations. Toward this end, Regions will work with States to implement a comprehensive program within the major urban nonattainment areas experiencing violations of the ozone standard and not anticipated to attain by 1987. Aggressive efforts by EPA and the States during 1987 to assess controls, adopt new and increasingly stringent control measures, and review the reductions achieved will ensure that effective progress in reducing volatile organic compound (VOC) emissions continues in these areas. Support of State programs for regulating in-use vehicles will continue, reflecting the importance of these programs to the attainment of standards. Regions will guide and assist States in preparing SIPs for the anticipated size-specific particulate (PM_{10}) NAAQS within the highest proability nonattainment areas. Regions will continue to place high priority on the implementation of various elements of the national air toxics strategy by promoting, assisting, and overseeing State and local agency plans and activities for the development and improvement of comprehensive air toxics programs. Regions will help States implement initiatives to gather data, evaluate exposures, and develop regulations where appropriate for mitigating exposure from high risk sources (including new sources to foster equity). Regions will help States initiate a multiple-year program to assess exposures and emissions in selected complex geographic areas having multiple source/pollutant interactions, including preparation of comprehensive inventories and analyses and the development of mechanisms for reducing exposures.

Resources will be provided for continuing at the 1986 level the National Air Audit System (NAAS) for review of State air quality planning, new source review, compliance assurance, air monitoring, and vehicle inspection/maintenance programs. Other Regional programs such as negotiating and overseeing grant agreements consistent with the Agency's performance-based grants policy, processing SIPs in an expeditious manner to minimize backlog, and responding to litigation on SIPs, will also continue.

1986 Program

In 1986, the Agency is allocating a total of $12,287,700 supported by 304.3 total workyears for this program, of which $11,623,000 is from the Salaries and Expenses appropriation and $664,700 is from the Abatement, Control and Compliance appropriation.

The principal focus of the Regional air management program is the implementation of the Agency's attainment policy for remedying deficient SIPs in areas violating the NAAQSs. Guidance is being provided to States developing corrective SIPs. Corrections are being reviewed for consistency and appropriate Federal Register rules are being completed.

Resources are also being provided to assist States to develop and implement the necessary regulations and programs for attainment of NAAQSs within areas having extensions of the attainment deadline for ozone and carbon monoxide. Also, resources are being provided to help States define requirements, assess possible problems, and prepare to respond to the anticipated NAAQS for PM_{10}.

Other significant actions include review and rulemaking on SIPs implementing court-ordered regulatory changes on stack heights. The NAAS is continuing on a biennial basis to evaluate State regulatory programs by reviewing half of the States every year. State-submitted revisions to SIPs are being processed in an expeditious manner, minimizing backlog. During 1985, the Agency completed and announced the National Air Toxics Strategy. Consistent with the national toxics strategy, initiatives are being undertaken to help States prepare multiple-year plans to build and enhance air toxics programs and to gather data needed to assess specific high risk pollutant or source situations. Specific steps will be taken to negotiate effective grant agreements with State and local agencies implementing Agency policy on performance-based grants.

1985 Accomplishments

In 1985, the Agency obligated a total of $11,152,600 supported by 284.9 total workyears, of which $10,852,400 was from the Salaries and Expenses appropriation and $300,200 was from the Abatement, Control and Compliance appropriation.

In 1985, Regional air management efforts focused on the development, review, and approval of State strategies, regulations, and actions in areas that missed the 1982 deadline or have extensions for attainment to 1987. Implementation of the Agency policy for remedying deficient SIPs in areas violating the NAAQSs continued.

The Regional program also worked with a number of States to develop lead SIPs consistent with provisions required by the settlement of litigation against the Agency. The Regions completed review and approval or disapproval actions where lead SIPs were submitted.

Rulemaking actions for State strategies and revisions continued to be processed in an efficient manner to prevent recurrence of any major SIP backlog. Also, the program continued to negotiate air grants and carry out the NAAS for review of State air quality planning, new source review, compliance assurance, air monitoring and inspection/maintenance programs.

AIR

Trends Monitoring & Progress Assessment

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Ambient Air Quality Monitoring								
Salaries & Expenses		$3,534.9	$3,781.0	$3,732.9	-$160.5	$3,572.4	$3,782.9	$210.5
Abatement Control and Compliance		$97.2	$114.2	$114.2	-$4.9	$109.3	$114.2	$4.9
	TOTAL	$3,632.1	$3,895.2	$3,847.1	-$165.4	$3,681.7	$3,897.1	$215.4
Air Quality & Emissions Data Management & Analysis								
Salaries & Expenses		$3,306.0	$3,151.8	$4,637.2	-$199.4	$4,437.8	$3,137.2	-$1,300.6
Abatement Control and Compliance		$1,841.9	$1,274.3	$1,274.3	-$54.9	$1,219.4	$1,229.3	$9.9
	TOTAL	$5,147.9	$4,426.1	$5,911.5	-$254.3	$5,657.2	$4,366.5	-$1,290.7
TOTAL:								
Salaries & Expenses		$6,840.9	$6,932.8	$8,370.1	-$359.9	$8,010.2	$6,920.1	-$1,090.1
Abatement Control and Compliance		$1,939.1	$1,388.5	$1,388.5	-$59.8	$1,328.7	$1,343.5	$14.8
Trends Monitoring & Progress Assessment	TOTAL	$8,780.0	$8,321.3	$9,758.6	-$419.7	$9,338.9	$8,263.6	-$1,075.3

AIR

Trends Monitoring & Progress Assessment

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Ambient Air Quality Monitoring	86.2	84.8	85.7		85.7	85.7	
Air Quality & Emissions Data Management & Analysis	63.2	65.1	65.1		65.1	65.1	
TOTAL PERMANENT WORKYEARS	149.4	149.9	150.8		150.8	150.8	
TOTAL WORKYEARS							
Ambient Air Quality Monitoring	91.6	92.5	92.5		92.5	92.5	
Air Quality & Emissions Data Management & Analysis	66.8	65.6	65.6		65.6	65.6	
TOTAL WORKYEARS	159.4	158.1	158.1		158.1	158.1	

AIR

Trends Monitoring and Progress Assessment

Budget Request

The Agency requests a total of $8,263,600 supported by 158.1 total workyears for 1987, a decrease of $1,075,300 and no change in total workyears from 1986. Of the request $6,920,100 will be for the Salaries and Expenses appropriation and $1,343,500 will be for the Abatement, Control and Compliance appropriation, a decrease of $1,090,100 and an increase of $14,800, respectively.

Program Description

This subactivity includes the following programs:

Ambient Air Quality Monitoring -- Activity in this program includes: (1) EPA's management overview of State ambient air quality monitoring networks, associated laboratory and field quality assurance activities, and implementation of air monitoring strategies described in EPA air monitoring regulations; (2) the coordination of Regional and State field investigation activities for collecting ambient air quality samples for subsequent sample analysis and related quality control; (3) the review of source emissions data; and (4) the necessary management and coordination to ensure timely storage and validation of the data collected.

Air Quality and Emissions Data Management and Analysis -- Major activities include: (1) national coordination of Regional Office, State, and local ambient monitoring, air quality modeling, and emission inventory programs; (2) issuance of new and revised regulatory requirements and related technical guidance; (3) development and operation of information management systems for storing, retrieving, and analyzing ambient air quality and emission data at the State and national level; and (4) preparation of trends analyses and related air quality and emission progress assessments for program evaluation and development and for public information needs.

AMBIENT AIR QUALITY MONITORING

1987 Program Request

The Agency requests a total of $3,897,100 supported by 92.5 total workyears for this program, of which $3,782,900 will be for the Salaries and Expenses appropriation and $114,200 will be for the Abatement, Control and Compliance appropriation. This represents increases of $210,500 and $4,900, respectively and no change in total workyears. The increases reflect primarily increased operating costs for the program.

In 1987, the EPA Regional Offices will continue overview and management of State air monitoring programs, including review of grants made under section 105 of the Clean Air Act. They will also continue the coordination of data bases involving emissions data, criteria pollutant air quality data, and related precision and accuracy information necessary for quantifying data quality. Monitoring networks and data supporting highly controversial or technically difficult construction permits under the prevention of significant deterioration program will be reviewed.

The data bases from the National Air Monitoring System (NAMS) and State and Local Air Monitoring System (SLAMS) networks will be validated for completeness and accuracy. Approximately 100 new or revised NAMS sites will be visited, evaluated, and documented. Data analyses, including air quality and emission trends information, will be developed as input to various environmental management and indicator efforts, including the Regional Environmental Management Reports. In the area of quality assurance, significant resources will be used for on-site systems and performance audits of State networks and monitors. In addition, the

Regional labs will participate in the national air audit program. The start-up of State networks for measurement of size-specific particulates (PM_{10}) will require review of the NAMS and SLAMS networks, including site visits to verify compliance with the new monitoring regulations.

Regional Offices will be involved in the implementation of the air toxics monitoring strategy. This involvement will include coordinating with State and local agencies and the EPA Office of Research and Development to set up additional air toxics monitoring trend stations, assisting in site selection for monitoring stations, and ensuring samples are collected and sent to a central laboratory for analysis.

Resources will also provide monitoring/quality assurance support and technical assistance to States in evaluating the impact of sources of specific toxic air pollutants. These sources would be ones considered for regulation under State control programs. Special ozone data analyses will be performed for selected cities where attainment is not expected in 1987. Resources will be used for management, coordination and technical assistance necessary to develop a toxic data base in specific geographic areas. The support will include emission and air quality data bases as well as ancillary information needed for modeling.

1986 Program

In ~~1986,~~ the Agency is allocating a total of $3,681,700 supported by 92.5 total workyears for this program, of which $3,572,400 is from the Salaries and Expenses appropriation and $109,300 is from the Abatement, Control and Compliance appropriation.

In 1986, the Regions are continuing the baseline program of overview and management of State emissions and air quality monitoring programs, including section 105 grants review. The Regions are continuing their program of on-site visits to review and audit NAMS networks and a small percentage of SLAMS. The validation and coordination of State and local air quality and emission data, before the data are submitted to central EPA data banks, are also continuing. In 1986, special emphasis is being placed on reviewing the data bases upon which attainment status determinations will be made for the revised National Ambient Air Quality Standard (NAAQS) for PM_{10}. The Regions and States are continuing their analysis of the total monitoring network needed to support development of State Implementation Plans (SIPs) for size-specific particulates and subsequent tracking of progress and trends in meeting the revised NAAQS. The data needed for various environmental management efforts are being compiled and displayed for use in determining existing conditions, trends, and progress toward environmental objectives. Quality assurance activities and auditing of State programs are continuing, with additional emphasis placed on the National Air Audit System. The toxic air monitoring station network is being operated in three cities.

1985 Accomplishments

In 1985, the Agency obligated $3,632,100 supported by 91.6 total workyears for this program, of which $3,534,900 was from the Salaries and Expenses appropriation and $97,200 was from the Abatement, Control and Compliance appropriation. Contract funds from the Abatement, Control, and Compliance appropriation were used for Regional data analyses and preparation of the Regional Environmental Management Reports.

Ths SLAMS networks were reviewed and an assessment of equipment needs made. The Regional Offices continued to work with States, through the annual review process, in identifying and eliminating air monitoring sites which have only marginal utility or are the least useful in supporting program decisions. The Regions continued their programs of site visits to evaluate and document NAMS stations, as well as a small percentage of SLAMS stations. Laboratories were evaluated for proper operating and quality assurance procedures. The management, coordination, and validation of State and local air quality and emission data before submission to EPA's central data banks also continued.

AIR QUALITY AND EMISSIONS DATA MANAGEMENT AND ANALYSIS

1987 Program Request

The Agency requests a total of $4,366,500 supported by 65.6 total workyears for this program, of which $3,137,200 will be for the Salaries and Expenses appropriation and $1,229,300 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $1,300,600 and an increase of $9,900, respectively, and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease reflects completion of the air quality subsystem and elements of the facility subsystem of the Aerometric Information Retrieval System (AIRS).

Existing air data systems will be maintained and guidance provided to users. Monitoring regulations, modeling guidance, emission factors, and computer software will be modified to accommodate changes to NAAQSs. The program also will produce ambient and emission trends analyses and progress assessments, provide national oversight of Regional Office and State and local air monitoring programs, and manage the NAMS network. A fine particulate monitoring strategy will be developed. The program will also continue development of the facility subsystem of the AIRS and bring the air quality subsystem into operation within EPA and selected control agencies in preparation for phasing out the obsolete Storage and Retrieval of Aerometric Data (SAROAD) system. Statistical analyses will be provided to support new or revised NAAQSs.

In the area of air toxics, the program will continue to implement the national toxics monitoring strategy. The Toxic Air Monitoring System (TAMS) network will be expanded. Implementation of the Agency National Air Toxics Strategy will continue with the development of guidelines on ambient monitoring and guidance for estimating emissions and developing emissions inventories for several toxic pollutants and/or source categories of concern to State or local agencies. In addition, the program will provide specialized scientific data and guidance to States developing SIPs for PM_{10}. The program will also develop data and technical guidance to support new and revised NAAQSs, with emphasis on rural ozone and fine particulates. Specialized analyses will also be conducted to assist in resolving remaining post-1982 nonattainment problems.

In addition, emission factors for criteria pollutants will be updated for high priority source categories and work will be completed on developing an emissions data base for acid precipitation assessments. The modeling program will continue. This includes active implementation of the modeling guideline, guidance and oversight of modeling applications, impact analyses to support New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and NAAQS development, and operation of the modeling clearinghouse for sulfur dioxide.

1986 Program

In 1986, the Agency is allocating a total of $5,657,200 supported by 65.6 total workyears for this program, of which $4,437,800 is from the Salaries and Expenses appropriation and $1,219,400 is from the Abatement, Control and Compliance appropriation.

Improvements to the general monitoring regulations are being promulgated. Also, revised monitoring regulations to reflect revisions to the NAAQSs for particulate matter and sulfur dioxide are being proposed. Implementation of the toxic pollution monitoring strategy is continuing with the expansion of the TAMS network to two sites in each of the TAMS' three cities.

The emissions program is concentrating on completing PM_{10} emission factors, managing Regional Office and State efforts to develop an emissions data base for acid preicpitation assessments, completing reports on dioxin emission tests, and providing preliminary data for toxic pollutants. The modeling program is being maintained. An updated modeling guideline is being promulgated, operation of the sulfur dioxide Model Clearinghouse and other photochemical and dispersion modeling guidance activities are continuing, and the multi-year program to evaluate model accuracy is proceeding on schedule. Diffusion modeling support is continuing for estimating the effect of toxic emissions on the environment as the Agency's air toxics strategy is implemented. Development of the facility subsystem for AIRS has been initiated. Development of the air quality subsystem will continue with testing of software and preparation of data bases for conversion. Scientific analyses in support of new and revised ambient and emission standards are continuing. Efforts to develop the scientific data, monitoring regulations, emission factors, and other technical guidance necessary for successful implementation of the proposed PM_{10} NAAQS will be continued.

1985 Accomplishments

In 1985, the Agency obligated $5,147,900 supported by 66.8 total workyears for this program, of which $3,306,000 was from the Salaries and Expenses appropriation and $1,841,900 was from the Abatement, Control and Compliance appropriation. Contract funds supported the ambient monitoring program, the emission factor program, air quality modeling, guidance for revised NAAQS implementation and trends reports and analyses.

In 1985, emphasis continued on operating the existing air data systems, and on providing support to 35 State and local agencies using EPA developed data systems. Other major activities included preparation of special air quality and emission analyses, statistics, and reports; national oversight of State and local monitoring programs including on-site audits of 70 NAMS; and modeling guidance and support including operation of the control strategies clearinghouse. Implementation of the national strategy for air toxics monitoring continued, including preparation of guidance on network design and operation; assessing progress in toxics monitoring by Federal, State, and local agencies; and developing a long-term plan for the implementation of the toxics monitoring strategy. Emission tests were conducted to support the National Dioxin Study. Also, in 1985, the program published one criteria pollutant emission factor supplement and emission factors for five toxic substances. PM_{10} emission inventory guidance was also prepared. Development of the air quality segment of AIRS continued with completion of software for maintaining the geographical files, converting data, and retrieving data.

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Stationary Source Enforcement

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Stationary Source Enforcement								
Salaries & Expenses		$10,790.7	$12,008.5	$11,883.0	-$511.1	$11,371.9	$12,155.8	$783.9
Abatement Control and Compliance		$2,981.0	$3,038.0	$3,038.0	-$130.6	$2,907.4	$2,941.0	$33.6
	TOTAL	$13,771.7	$15,046.5	$14,921.0	-$641.7	$14,279.3	$15,096.8	$817.5
TOTAL:								
Salaries & Expenses		$10,790.7	$12,008.5	$11,883.0	-$511.1	$11,371.9	$12,155.8	$783.9
Abatement Control and Compliance		$2,981.0	$3,038.0	$3,038.0	-$130.6	$2,907.4	$2,941.0	$33.6
Stationary Source Enforcement	TOTAL	$13,771.7	$15,046.5	$14,921.0	-$641.7	$14,279.3	$15,096.8	$817.5
PERMANENT WORKYEARS								
Stationary Source Enforcement		282.0	291.0	291.4		291.4	297.4	6.0
TOTAL PERMANENT WORKYEARS		282.0	291.0	291.4		291.4	297.4	6.0
TOTAL WORKYEARS								
Stationary Source Enforcement		297.3	312.5	312.4		312.4	318.4	6.0
TOTAL WORKYEARS		297.3	312.5	312.4		312.4	318.4	6.0

AIR

Stationary Source Enforcement

Budget Request

The Agency requests a total of $15,096,800 supported by 318.4 total workyears for 1987, an increase of $817,500 and 6.0 total workyears from 1986. Of the request $12,155,800 will be for the Salaries and Expenses appropriation and $2,941,000 will be for the Abatement, Control and Compliance appropriation, increases of $783,900 and $33,600, respectively.

Program Description

The stationary source enforcement program provides direct Federal enforcement and support to, and coordination with, State and local air pollution control agencies as required to ensure that stationary sources achieve and maintain compliance with the requirements of the Clean Air Act, as amended in 1977. The EPA headquarters component provides national policy and guidance, while the Regional Office program implements the enforcement effort and assists the States.

Stationary Source Enforcement -- This program focuses primarily on enforcement of the requirements established in State Implementation Plans (SIPs) for meeting National Ambient Air Quality Standards (NAAQSs). The enforcement program also focuses on new source programs such as New Source Performance Standards (NSPSs) and National Emission Standards for Hazardous Air Pollutants (NESHAPs).

As a result of industry efforts in controlling emissions and the effectiveness of State, local, and Federal control programs, approximately 90 percent of the more than 18,000 major stationary sources have achieved compliance with all applicable emission limitations. Although the current rate of compliance represents a significant achievement, efforts must continue to ensure that remaining sources come into compliance with present standards, that compliance is obtained with any new or revised standards, and that compliance, once achieved, is maintained. EPA will continue to provide State and local agencies with technical support in their efforts to realize these goals and, where appropriate, initiate its own enforcement actions.

STATIONARY SOURCE ENFORCEMENT

1987 Program Request

The Agency requests a total of $15,096,800 supported by 318.4 total workyears for this program, of which $12,155,800 will be for the Salaries and Expenses appropriation and $2,941,000 will be for the Abatement, Control and Compliance appropriation. This represents increases of $783,900 and $33,600, respectively, and an increase of 6.0 total workyears. Increased resources will support a pilot inspection project to determine whether intensive inspections of particulate and volatile organic compound (VOC) sources can result in a major reduction in air toxics.

In 1987, the stationary source compliance program will carry forward the basic thrust of the program now being implemented in 1986. The program, working in close cooperation with State and local agencies, will continue to ensure that noncomplying significant sources in areas not meeting NAAQSs are brought into compliance, consistent with the Clean Air Act. Enforcement actions will be brought against NSPSs, NESHAPs, and prevention of significant deterioration (PSD) violators and against Class A sources in nonattainment areas (i.e., sources with actual or potential uncontrolled emissions of at least 100 tons per year).

Implementation of the asbestos demolition and renovation strategy will continue, as will initiatives to enforce other NESHAPs. Use of Continuous Emissions Monitoring (CEM) data will be expanded in inspection targeting and enforcement. The fundamental activities such as permitting and compliance functions for nondelegated programs, maintenance of data systems, participation in section 105 grant management and negotiation of State/EPA Agreements, review of State programs, and response to formal inquiries will be maintained.

In 1987, the stationary source compliance program will be increasing its efforts to enhance the compliance of VOC sources in ozone nonattainment areas. This will include an intensified overview program with additional and more comprehensive inspections of VOC sources in selected ozone nonattainment areas.

A pilot project will also be initiated to determine whether intensive inspections of sources subject to current air pollution emission standards for particulates and VOCs can result in a significant reduction in air toxics. Such intensive inspections should result in greater attention to source operation and maintenance, minimizing constant or cyclic emissions which in the aggregate present a significant health risk, especially in "hot spot" areas comprising a multiplicity of sources with such emissions.

During 1987, the Regional compliance program will continue to provide assistance in selected Federal judicial referrals, consent decrees, and section 120 actions. There are plans to conduct an estimated 1,694 inspections, and issue approximately 131 administrative orders during 1987. The Regional Offices will also provide training and workshops for State inspectors and support the development of local compliance strategies.

In 1987, EPA Headquarters will develop policy guidance and planning and budgeting materials; review selected Regional activities and Regional program performance; assure the enforceability of proposed Agency regulations under NSPSs, NESHAPs, and new source/PSD programs; respond to formal inquiries; manage the Compliance Data System; develop workshops, manuals, and pilot studies; and manage a program to provide technical analysis and case support for Regional compliance activities.

1986 Program

In 1986, the Agency is allocating a total of $14,279,300 supported by 312.4 total workyears to this program, of which $11,371,900 is from the Salaries and Expenses appropriation and $2,907,400 is from the Abatement, Control and Compliance appropriation.

The major focus of the stationary source compliance program in 1986 is to ensure that noncomplying significant sources are brought into compliance. Efforts to improve working relationships with State and local air pollution agencies and to improve their technical capabilities are continuing through such program-building activities as technical workshops and manuals, as well as direct case assistance where requested. Federal enforcement action is focusing heavily on violating sources in nonattainment areas, with particular emphasis on VOC sources. EPA is working closely with States in this effort through implementation of Agency guidance on timely and appropriate enforcement actions. Efforts are continuing to improve the inventory of regulated VOC sources and information on source compliance status. Efforts are also being directed at resolution of NSPS and NESHAP violators, where the standards have not been delegated or where State action is inadequate. Major initiatives in 1986 include implementation of the Agency's NESHAPs enforcement strategy for asbestos demolition and renovation sources and enforcement of CEM requirements for NSPS sources.

During 1986, the Regional compliance program is also continuing to provide assistance in selected Federal judicial referrals, consent decrees, and section 120 actions. Also, EPA is to issue administrative orders, as necessary, in environmentally significant cases where States cannot or will not take appropriate enforcement action. There are plans to conduct an estimated 1,725 inspections and issue approximately 105 administrative orders during 1986.

Headquarters efforts in 1986 include continuation of continuous compliance pilot projects. As part of the initiative to explore various techniques to address problems of ensuring continuous compliance, the surveillance targeting pilot initiated in 1985 is being completed and new pilot projects, relating to recordkeeping requirements and analysis of alleged malfunction data, are being initiated. Work to promote use of CEM equipment, including support for Regional and State efforts directed at enforcing CEM requirements for NSPS sources, is a major activity in 1986. Considerable emphasis is being placed on addressing issues relating to VOC sources, including development of strategies to address Class B violators. Oversight of Regional programs to ensure national consistency and effectiveness, through a combination of review of certain classes of enforcement actions and a more comprehensive programmatic review, remains a significant function of this program.

Major Headquarters program accomplishments in 1986 include: the development of a Class B VOC source compliance strategy; review of proposed Agency regulations under NSPSs, NESHAPs, and new source/PSD programs; management of the Compliance Data System; support of State compliance data programs development; provision of technical analysis and case support for Regional Office compliance activities, development of three new technical workshops to enhance the capabilities of State and local programs; and development of two new compliance manuals for State and local programs.

1985 Accomplishments

In 1985, the Agency obligated $13,771,700 supported by 297.3 total workyears for this program, of which $10,790,700 was from the Salaries and Expenses appropriation and $2,981,000 was from the Abatement, Control and Compliance appropriation. Extramural resources were used for enforcement case development activities, compliance monitoring, Regional data management, development of technical workshops and manuals to enhance State and local programs capabilities, and limited direct case assistance to States.

A major Headquarters accomplishment in 1985 was the implementation of the asbestos demolition and renovation and vinyl chloride NESHAPs compliance monitoring and enforcement strategies which address the most significant incidences of NESHAPs noncompliance. The inspection frequency guidance to State and local air pollution control agencies was revised to improve the definition of an acceptable inspection. As part of an effort to find ways to upgrade inspection programs, EPA completed three continuous compliance pilots.

Also during 1985, the program promulgated second-period nonferrous smelter order regulations, establishing a regulatory framework for compliance extensions through January 1, 1988. Program accomplishments during 1985 also included work toward the development of four technical workshops to enhance the capabilities of State and local programs, and completion of one new compliance manual. During 1985, EPA issued 101 administrative orders, and conducted 1726 inspections.

AIR

Mobile Source Enforcement

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Mobile Source Enforcement								
Salaries & Expenses		$4,653.6	$4,759.4	$4,950.2	-$212.8	$4,737.4	$4,897.7	$160.3
Abatement Control and Compliance		$1,962.1	$1,821.5	$1,821.5	-$78.3	$1,743.2	$2,021.5	$278.3
	TOTAL	$6,615.7	$6,580.9	$6,771.7	-$291.1	$6,480.6	$6,919.2	$438.6
TOTAL:								
Salaries & Expenses		$4,653.6	$4,759.4	$4,950.2	-$212.8	$4,737.4	$4,897.7	$160.3
Abatement Control and Compliance		$1,962.1	$1,821.5	$1,821.5	-$78.3	$1,743.2	$2,021.5	$278.3
Mobile Source Enforcement	TOTAL	$6,615.7	$6,580.9	$6,771.7	-$291.1	$6,480.6	$6,919.2	$438.6
PERMANENT WORKYEARS								
Mobile Source Enforcement		96.8	99.3	106.8		106.8	102.8	-4.0
TOTAL PERMANENT WORKYEARS		96.8	99.3	106.8		106.8	102.8	-4.0
TOTAL WORKYEARS								
Mobile Source Enforcement		103.9	101.1	108.6		108.6	104.6	-4.0
TOTAL WORKYEARS		103.9	101.1	108.6		108.6	104.6	-4.0

Mobile Source Enforcement

Budget Request

The Agency requests a total of $6,919,200 supported by 104.6 total workyears for 1987 an increase of $438,600 and a decrease of 4.0 total workyears from 1986. Of the request, $4,897,700 will be for the Salaries and Expenses appropriation and $2,021,500 will be for the Abatement, Control and Compliance appropriation, an increase of $160,300 and $278,300 respectively.

Program Description

The mobile source enforcement program is directed primarily at ensuring compliance with the motor vehicle emission standards and fuel regulations required by the Clean Air Act. The activities carried out as part of this program are designed to ensure that new and in-use vehicles are capable of meeting emission standards throughout their useful lives, that vehicle emission control systems are not removed or rendered inoperative, and that harmful additives are not present in gasoline. The program also includes the issuance of California and statutory emissions waivers.

MOBILE SOURCE ENFORCEMENT

1987 Program Request

The Agency requests a total of $6,919,200 supported by 104.6 total workyears for this program, of which $4,897,700 will be for the Salaries and Expenses appropriation and $2,021,500 will be for the Abatement, Control and Compliance appropriation. This represents increases of $160,300 and $278,300, respectively, and a decrease of 4.0 total workyears. The decreases are related to the fuels enforcement program. The increase will support additional recall and fuels investigation.

In support of the ozone control strategy, the recall program will involve investigation of 20 suspect light-duty vehicle exhaust emission classes, together with related diagnostic evaluation and remedy development work. Noncompliance penalties for heavy-duty engines will be implemented. An estimated five emissions waiver requests from the State of California will be processed. The regulatory revision of the imports requirements (scheduled for promulgation in late 1986) will be implemented, while at the same time the program will process an estimated 128,000 applications for importation of nonconforming vehicles. The Selective Enforcement Audit (SEA) program will conduct 17 audits of light-duty manufacturer facilities and four audits of heavy-duty manufacturer facilities to ensure that new production vehicles and engines meet emissions requirements. Approximately 1,200 consumer inquiries on emissions warranty issues will be answered. The anti-tampering and anti-fuel switching enforcement program will include 450 investigations, which will result in an estimated 50 notices of violation. Surveys of the incidence of tampering and fuel switching will be carried out at 15 sites. EPA will continue to assist with the development of State and local initiatives aimed at preventing tampering and fuel switching. Implementation of nine new State programs, for a cumulative total of 37, is anticipated. A new anti-tampering preventive action initiative will commence with the establishment of programs in ten locations. An expanded fuels enforcement program will focus on assuring that effective enforcement of the lead phasedown regulations is not limited to paper reviews of refineries and that it applies to all elements of the fuels market, including the growing numbers of importers and blenders; assuring that new fuel additives introduced into the market in response to the curtailment of lead do not pose new environmental hazards; conducting 12,000 inspections of vehicle fueling facilities and making determinations on an estimated three fuels waiver applications. A study of the effects of using unleaded and low lead gasoline on farm equipment will be completed.

1986 Program

In 1986, the Agency is allocating a total of $6,480,600 supported by 108.6 total workyears for this program, of which $4,737,400 is from the Salaries and Expenses appropriation and $1,743,200 is from the Abatement, Control and Compliance appropriation.

The recall program continues surveillance and confirmatory testing, follow-up and investigation of suspect engine classes, and, if warranted, issuance of recall orders. New activities underway in the recall program include a pilot evaporative emissions recall investigation program. Statutory and California waivers will be issued as required. The SEA program continues to ensure that new production vehicles comply with emission requirements. Inquiries and applications for the importation of noncertified vehicles will continue, and regulations revising the imports program will be promulgated.

Also underway is the development and implementation of a strategy aimed at attaining increased State participation to reduce automobile emissions that result from tampering and fuel switching. This will result in the establishment of nine new anti-tampering and fuel switching programs by States and localities. Other activities include: conducting fuels inspections for compliance with lead, nozzle, and label regulations; administering tampering and fuel switching cases; evaluating fuel and fuel additive waiver requests; and collecting data on fuel switching to assess misfueling rates. A study of the effects on farm equipment of the lead phasedown regulations will be started.

1985 Accomplishments

In 1985, the Agency obligated $6,615,700 supported by 103.9 total workyears for this program, of which $4,653,600 was from the Salaries and Expenses appropriation and $1,962,100 was from the Abatement, Control and Compliance appropriation.

Recall investigations were conducted for 35 mid-mileage vehicle classes, and 17 SEAs were performed. Two emissions waivers were issued and nine were reviewed. Over 16,000 letters and 44,000 telephone inquiries regarding importation of vehicles were answered and 69,383 applications were received. Revised import regulations were prepared. Six notices of violation were issued under the lead phasedown program, and 645 notices of violation under the anti-tampering and fuel switching program. Five States and localities implemented anti-tampering and fuel switching programs. A revised rule for phasing down the use of lead in gasoline was promulgated.

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WATER QUALITY

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$95,148.0	$98,791.6	$99,808.8	-$4,291.8	$95,517.0	$95,712.1	$195.1
Abatement Control and Compliance	$127,048.3	$131,306.9	$144,646.9	-$6,219.8	$138,427.1	$114,628.9	-$23,798.2
Research & Development	$14,713.6	$11,587.7	$12,124.7	-$521.7	$11,603.0	$7,500.0	-$4,103.0
Abatement Control and Compliance	$13,000.0						
TOTAL, Water Quality	$249,909.9	$241,686.2	$256,580.4	-$11,033.3	$245,547.1	$217,841.0	-$27,706.1
PERMANENT WORKYEARS	1,957.0	2,003.3	2,056.5		2,056.5	2,021.1	-35.4
TOTAL WORKYEARS	2,191.5	2,248.6	2.283.0		2,283.0	2,181.8	-101.2
OUTLAYS	$240,952.3	$241,236.4	$246,907.3	-$6,595.9	$240,311.4	$235,732.7	-$4,578.7
AUTHORIZATION LEVELS	Authorization for the Clean Water Act, except for Construction Grants, expired September 30, 1982. The authorization for Construction Grants expired September 30, 1985. Reauthorization for both is pending.						

WATER QUALITY

OVERVIEW AND STRATEGY

The Agency derives its water quality objectives from two statutes: the Clean Water Act and the Marine Protection, Research and Sanctuaries Act. Both laws direct the Agency to take measures to protect the Nation's waters to safeguard public health, recreational use, and aquatic life.

The Clean Water Act provides a comprehensive structure for water pollution control. The Act relies on a well-defined partnership between EPA and the States. EPA continues to encourage the States to take primary responsibility for implementing the Act. The Act provides for monitoring of water quality, water quality management planning to design needed control measures, development of water quality standards, and establishment of technology-based and water quality-based effluent limits for point source dischargers. EPA and the States implement a permit and enforcement program for municipal and industrial point source dischargers. EPA and the Corps of Engineers regulate discharges of dredged and fill materials into U.S. waters. In addition, the Act provides for grants to communities for construction of wastewater treatment facilities.

The Marine Protection, Research and Sanctuaries Act is designed to protect the ocean from unregulated dumping of material that would endanger human health, public welfare, the marine environment, or economic potential. The Act authorizes the Agency to develop criteria for ocean disposal of industrial waste, municipal sludges and other materials, and dredged materials and incineration-at-sea. For both ocean dumping and incineration-at-sea, EPA is authorized to designate disposal sites and issue permits for all non-dredged materials. Although the Corps of Engineers is responsible for issuing permits for dredged materials, EPA must review those applications for consistency with Agency criteria.

In 1987 and beyond, water quality programs will follow several major directions to include moving base programs from standards and guidance development to implementation and compliance; emphasizing toxic controls across all programs; strengthening protection of all waters from from difficult or uncontrolled sources of pollution; focusing on integrated intermedia impacts; and managing for targeted environmental results.

The 1987 Water Quality request focuses on several major objectives to meet the requirements of the Acts in the 1980s:

National Municipal Policy Enforcement Follow-Up

The National Municipal Policy was adopted by the Agency as a means of assuring that all municipalities meet the statutory requirements for wastewater discharge limitations by no later than July 1, 1988, except in cases of physical or financial impossibility. The policy has substantial environmental significance as it seeks to accelerate the installation of necessary treatment technology, thus reducing the loading of pollutants, including toxic pollutants, introduced into the Nation's waters. With the rapidly approaching deadline, and with the potential contribution by municipalities to water quality standards violations, including toxics, this activity will continue to be a high priority in 1987. By the end of 1986, all major municipalities in nondelegated States needing construction to meet permit limits will have been placed on enforceable schedules. In 1987, EPA will focus on assuring that permittees placed on enforceable schedules comply with those schedules and will substantially increase efforts to place minor permittees on enforceable compliance schedules.

Pretreatment Compliance and Enforcement

The pretreatment program provides a mechanism for the control of toxic discharges to sewage treatment plants, thus protecting treatment plant operation and reducing the pass-through of toxic pollutants to the environment. By the end of 1986, all Publicly Owned Treatment Works (POTWs) needing pretreatment programs should have approved programs in place.

In 1987, EPA efforts will shift from program approval to oversight of delegated State programs, oversight of approved POTW programs where there is no State delegation, and direct implementation where there is no local control authority or approved State. Direct implementation by EPA will include compliance assessment and enforcement against industrial users, including detailed sampling inspections where necessary, to determine compliance with categorical standards.

EPA will initiate enforcement actions against noncomplying POTWs in nondelegated States which fail to implement the approved program. Parallel enforcement actions will be taken against industries which discharge into these POTWs.

Permit Issuance

Permit issuance will continue to focus on control of toxic pollutants discharged to surface waters. The EPA major permit backlog should be eliminated by the end of 1985 and the backlog will stay below 10% at least through 1987. The general focus during 1987 will be on issuing permits that expired or will expire during the year and on modifying permits, with priority being given to toxic pollutant controls and water quality considerations. EPA will continue to work with delegated States and assist them in reducing their major permit backlog, which should be eliminated by the end of 1986. Additionally, major municipal permits will be modified to incorporate final 301(h) waiver decisions, pretreatment program approvals and related implementation requirements. Increased emphasis will be placed on issuing permits to environmentally significant minor and unpermitted dischargers, especially those that adversely affect water quality and those with toxic discharges.

In waters where Best Available Technology (BAT) is not sufficient to achieve State water quality standards, EPA will continue to support States in adopting toxic criteria in water quality standards; to strengthen State capability to develop and issue water quality-based limitations for the control of toxic discharges; and to provide technical assistance in conducting waste load allocations which form the basis for permit limits based on water quality.

Analysis of Toxic Pollutants

To support State water quality programs, EPA's criteria program will continue its work to identify and evaluate toxic pollutants through development of water quality criteria and advisories. Emphasis will shift from conventional pollutants and heavy metals to toxic pollutants which may be ubiquitous in the environment or whose potentially toxic effects at low levels are not known.

The program will also continue data collection and analyses of eight unregulated industrial categories known to discharge toxic pollutants, such as organic chemicals and metals, in significant amounts. The Agency will use these analyses to decide whether technology-based controls are needed for these industries.

In the area of intermedia impacts, the program will promulgate regulations for the use or disposal (land applications, distribution and marketing, landfilling, incineration and ocean disposal) of sewage sludge that protect human health and the environment from toxic pollutants in sludge. The program will examine other unregulated contaminants in fish tissue with potential to bio-accumulate in the food chain and consequently harm human health. This analysis of bioaccumulative pollutants may identify pollutants for which EPA needs to develop criteria in future years.

Implementing a Marine Protection Program

The incineration-at-sea program should become operational with corresponding demands for permit writing and compliance activities for both burn sites and burn operations. These activities will also generate an increased need for monitoring at designated sites to assure minimal risk to the environment. There will be an increased emphasis on public outreach to increase the understanding of the general public to the environmental safety of the process. A national data system will be used to develop a systematic in-depth profile of the incineration process as a basis for future forecasting of environmental impacts and to develop recommendations for improved operations.

Comprehensive revisions to the ocean dumping regulations will be proposed. Ongoing site management responsibilities for ocean dumping sites will increase as more sites are designated final and the usage of deep water disposal sites increases.

Focusing on Basins of Major Importance

The Agency will continue to focus on basins of major importance to the public and the Congress, by continuing the Federal commitment to the Chesapeake Bay and Great Lakes program, as well as to the estuarine management program begun in 1985. The Agency will support actions to implement the Chesapeake Bay Restoration and Protection Plan, through cost-sharing grants to the States, primarily for implementation of nonpoint source control practices in critical areas.

EPA's Great Lakes National Program Office will continue to meet the U.S. obligations under our International Agreement with Canada to support water pollution control in the Great Lakes. The focus will be on remedial action plans for the abatement of in-place toxics problems and the use of fish, water, and air sampling to determine water quality improvement and to identify emerging problems.

In 1987, the Agency will continue work begun in 1985 to quantify and control pollutant loads, assess basin-wide trends and recommend needed actions to restore or enhance environmental quality of Long Island Sound, Narragansett Bay, Buzzards Bay, and Puget Sound. The Agency will manage a technology transfer system to ensure that the technologies and methodologies developed in these basins are shared with other Federal, State and local programs.

In order to address nonpoint sources of pollution, EPA will work with other Federal agencies to identify and encourage the use of appropriate best management practices on Federal lands, with special emphasis on priority areas such as the Chesapeake Bay. EPA will continue to encourage those agencies to support development of cost-effective State and local programs to control nonpoint sources in priority waters.

Continuing Protection of Wetlands

The major effort in 1987 in the dredge and fill program will be to move toward a more focused, anticipatory program through the use of advanced identification; development and application of technical guidance and regulations to ensure effective protection of the waters of the United States; and encourage States to assume Section 404 permitting authority from the Federal government.

Headquarters will develop guidance and implement revised procedures to identify and address the most significant national environmental problems in wetlands and other aquatic systems. The Regions will review and comment on public notices of permit applications and will establish jurisdictional boundaries. Headquarters and Regions will develop innovative techniques to encourage State assumption of the program and increase cooperative efforts with other Federal agencies.

Managing Construction Grants

The Agency will work with States in order to ensure an effective transition of management and financial responsibility to State and local governments. EPA will issue needed policies and guidance and provide technical assistance and training. EPA will continue essential oversight of delegated State programs and wastewater treatment facilities construction, operations, and maintenance to ensure continuing compliance with program requirements.

Although the Agency's request for budget authority is reduced from 1986, staffing remains relatively constant due to continuing workload associated with managing and completing projects funded from previous appropriations.

Environmental Emergency Response

The Environmental Emergency Response program will continue to maintain an around-the-clock capability to receive notice of and respond to major incidents of accidental releases of oil or other petroleum products. (Spills of hazardous substances are covered under Superfund.) Removal actions will be directed by Regional personnel at serious incidents where the responsible party is unidentifiable, refuses to clean up, or is incapable of providing adequate response, and where State or local authorities lack appropriate expertise or resources.

The cleanup monitoring program will continue to provide incentives for adequate removal by responsible parties, as well as serve as a mechanism for drawing State and local agencies into directing removals themselves. The Agency's focus in 1987 will be on encouraging State and local governments to assume a greater share of the responsibility for responding to oil spills. Federal resources, therefore, will be concentrated on major actions where State, local, or private response is not feasible.

Research and Development

In 1987 the program will emphasize research to support the development and implementation of regulations for sludge management and the impact of ocean dumping and incineration-at-sea on the marine ecosystem. The program will also initiate work for categorizing wetlands. Ongoing support for the permits and enforcement programs through validation of toxicity reduction evaluations and operation of the Discharge Monitoring Report Quality Assurance Program will be maintained. Evaluations of innovative and alternative waste treatment control technologies will continue. A pilot program will be initiated to charge to public and private users for certain quality assurance services provided by EPA.

WATER QUALITY

	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
PROGRAM ACTIVITIES					
Incremental Outputs					
Ocean Dumping Permits	25	25	25	25	--
Construction Grants Awards	476	683	148	306	-148
Active Construction Grants Projects	4,319	3,972	2,849	2,352	-803
Step 3 and Step 2+3 Project Completions	833	942	773	821	+48
Permits Issued by EPA:					
Municipal					
Major	278	216	204	172	-32
Minor	411	250	320	500	+180
Non-Municipal					
Major	210	187	193	244	+51
Minor	650	500	306	1000	+694
General	2	15	8	15	+7
Adjudicatory Hearings Settled	67	104	80	104	+24
Enforcement Actions:					
Inspections	2,080	2,100	2,100	2,243	+143
Notices of Violation	24	110	50	50	--
Administrative Orders	1,028	491	642	877	+235
Civil Litigation	118	159	180	153	-27
Criminal Litigation	7	7	5	5	--
Clean Lakes Projects Awarded	30	0	25	0	-25
Water Quality Criteria	19	17	10	9	-1
Cumulative Outputs					
Signed 205(g) agreements	50	51	50	50	--
Final Effluent Guidelines	28	29	37	41	+4
Propose Regulations for Sludge Reuse/Disposal Options	--	5	5	5	--
NPDES State Program Approvals	37	41	39	39	--
Local Pretreatment Program Approvals (EPA)	581	730	670	670	--

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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WATER QUALITY

Water Quality Research

(DOLLARS IN THOUSANDS)

PROGRAM	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Scientific Assessment - Water Quality							
Salaries & Expenses	$285.9	$302.5	$302.8	-$13.1	$289.7	$302.8	$13.1
Research & Development	$75.1	$90.0	$89.4	-$3.9	$85.5	$383.0	$297.5
TOTAL	$361.0	$392.5	$392.2	-$17.0	$375.2	$685.8	$310.6
Monitoring Systems And Quality Assurance - Water Quality							
Salaries & Expenses	$2,748.3	$2,840.5	$2,741.8	-$117.8	$2,624.0	$2,719.6	$95.6
Research & Development	$694.0	$861.9	$857.3	-$36.9	$820.4	$25.0	-$795.4
TOTAL	$3,442.3	$3,702.4	$3,599.1	-$154.7	$3,444.4	$2,744.6	-$699.8
Health Effects - Water Quality							
Salaries & Expenses	$1,313.5	$1,529.9	$1,458.9	-$62.7	$1,396.2	$1,515.4	$119.2
Research & Development	$1,386.2	$1,460.6	$1,334.3	-$57.3	$1,277.0	$1,000.0	-$277.0
TOTAL	$2,699.7	$2,990.5	$2,793.2	-$120.0	$2,673.2	$2,515.4	-$157.8
Environmental Engineering And Technology - Water Quality							
Salaries & Expenses	$2,794.3	$2,384.6	$2,441.6	-$105.1	$2,336.5	$2,351.0	$14.5
Research & Development	$5,464.8	$5,731.2	$5,170.9	-$222.5	$4,948.4	$3,892.0	-$1,056.4
TOTAL	$8,259.1	$8,115.8	$7,612.5	-$327.6	$7,284.9	$6,243.0	-$1,041.9
Environmental Processes And Effects - Water Quality							
Salaries & Expenses	$8,486.3	$9,357.2	$9,214.9	-$396.3	$8,818.6	$9,561.0	$742.4
Research & Development	$1,789.6	$2,944.0	$2,775.4	-$119.4	$2,656.0	$1,700.0	-$956.0
TOTAL	$10,275.9	$12,301.2	$11,990.3	-$515.7	$11,474.6	$11,261.0	-$213.6

WATER QUALITY

Water Quality Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Great Lakes Research - Water Quality							
Salaries & Expenses	$970.4	$683.3	$683.1	-$29.4	$653.7	$434.8	-$218.9
Research & Development	$1,341.4	$500.0	$1,897.4	-$81.7	$1,815.7	$500.0	-$1,315.7
TOTAL	$2,311.8	$1,183.3	$2,580.5	-111.1	$2,469.4	$934.8	-$1,534.6
TOTAL:							
Salaries & Expenses	$16,598.7	$17,098.0	$16,843.1	-$724.4	$16,118.7	$16,884.6	$765.9
Research & Development	$10,751.1	$11,587.7	$12,124.7	-$521.7	$11,603.0	$7,500.0	-$4,103.0
Water Quality Research TOTAL	$27,349.8	$28,685.7	$28,967.8	-$1,246.1	$27,721.7	$24,384.6	-$3,337.1
PERMANENT WORKYEARS							
Scientific Assessment-Water Quality	3.0	2.5	4.5		4.5	4.5	
Monitoring Systems And Quality Assurance - Water Quality	46.4	42.5	42.7		42.7	42.7	
Health Effects - Water Quality	17.0	17.0	27.8		27.8	20.8	-7.0
Environmental Engineering And Technology - Water Quality	43.3	38.6	38.7		38.7	37.5	-1.2
Environmental Processes And Effects - Water Quality	127.2	148.9	148.1		148.1	150.5	2.4

WATER QUALITY

Water Quality Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
Great Lakes Research - Water Quality	6.8	6.4	6.4		6.4	6.4	
TOTAL PERMANENT WORKYEARS	243.7	255.9	268.2		268.2	262.4	-5.8
TOTAL WORKYEARS							
Scientific Assessment - Water Quality	6.0	6.0	6.0		6.0	6.0	
Monitoring Systems And Quality Assurance - Water Quality	55.7	54.0	53.4		53.4	53.4	
Health Effects - Water Quality	24.4	27.8	27.8		27.8	27.8	
Environmental Engineering And Technology - Water Quality	46.3	42.7	42.5		42.5	40.5	-2.0
Environmental Processes And Effects - Water Quality	157.7	187.0	184.6		184.6	176.0	-8.6
Great Lakes Research - Water Quality	10.0	8.0	8.0		8.0	8.0	
TOTAL WORKYEARS	300.1	325.5	322.3		322.3	311.7	-10.6

WATER QUALITY

Water Quality Research

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control

- Evaluation of the feasibility of applying the ecoregion approach to water quality standards (Env. Processes)
- Determination of the relationship between lipid content, body burden and the thermodynamic calculation of bioaccumulation (Env. Processes)
- Development of Water Quality Health Advisories (Sci. Assessment)
- Provision of site specific Water Quality Health Hazard Evaluations/Documentation, and Water Quality Criteria Modification Support (Sci. Assessment)
- Provision of Health Effects Bioassay Methods Manual for determining whether receiving streams meet Water Quality Standards (Health)
- Evaluation of a generic approach for chemical measurement of toxic organics and inorganics in ambient and non-point sources (Monitoring)

Objective 2: Develop Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Programs

- Hazard assessment methodologies for the 106-mile ocean dumping site (Env. Processes)
- Conduct a multimedia risk assessment for the disposal of dredged material (Env. Processes)
- Report on predictive methods for the removal of metals and problem organics for ocean discharge (Engineering)
- Report on Application and Verification of a Protocol for Field Exposure Effects Assessment for Designated Areas of Concern in the Great Lakes (Env. Processes)

Objective 3: Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology

- Criteria documents for pathogens and chemicals in sludge (Sci. Assessment)
- Development and refinement of risk assessment methods for sludge contaminants (Sci. Assessment)
- Provision of quality assurance support for the self-monitoring discharge monitoring report program (Monitoring)
- A report on the Occurrence of Microorganisms in Distribution and Marketing of Sludge Products (Health)
- Regional I/A Technology transfer seminars (Engineering)
- Reports on updated actual capital and operation and maintenance costs for small community technologies (Engineering)

1986 PLANNED OUTPUTS

Objective 1: Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control

- Determination of the adequacy of two short-term chronic toxicity tests in assessing effluent toxicity (Env. Processes)

- o Evaluation of chemical monitoring methods and field trials of protocols designed to measure site-specific aspects of water quality (Monitoring)
- o Technical support to complete the recreational water quality criteria (Health)
- o Revision of Average Daily Intake (ADIs) calculations for 65 water quality criteria documents (Sci. Assessment)

Objective 2: Develop Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Program

- o Conduct a correlation analysis of the biological effects (toxicity) to contaminant gradients in a designed area of concern in the Great Lakes (Env. Processes)
- o Evaluation of the biological effects and engineering methodology performance for at-sea incineration (Env. Processes)
- o Development of methods for conduct of a wasteload allocation of sewage sludge at the 106-mile ocean disposal site (Env. Processes)
- o Report on partitioning of metals and organics in wastewater during treatment for ocean discharge (Engineering)

Objective 3: Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology

- o Final methodologies for preliminary hazard indices for landfilling of municipal sludge and for chemical and pathogen risk assessment criteria in sludge (Sci. Assessment)
- o Reports on new and improved alternative on-site system design, costs, and performance (Engineering)
- o Evaluation of the toxicity of major chemicals found in sludge (Health)

1985 ACTUAL OUTPUTS

Objective 1: Develop Scientific Data to Support a Water Quality Based Approach to Pollution Control

- o Report on techniques for assessing complex effluents in receiving waters (Monitoring)
- o Development of aquatic life water quality criteria documents for aluminum, cyanide, lead, mercury, cadmium, copper, ammonia, chlorine and arsenic (Env. Processes)
- o Completion of the Health section of the technical support document for water quality based toxics control (Health)

Objective 2: Develop Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Programs

- o Documentation manuals for a three dimensional physical transport model and a three dimensional hydrodynamic model for use in the Great Lakes (Env. Processes)
- o Evaluation of effects and exposure assessment methods to determine the applicability of these procedures for use in a dredged material disposal hazard assessment (Env. Processes)
- o Examination of the effects of pollutant interactions on sediment toxicity (Env. Processes)

Objective 3: Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology

- o Development of an accumulation system for the analysis of purgeable and extractable organics in water (Env. Processes)
- o Report on the health effects from land application of sludge (Health)
- o Feasibility study for risk assessment of pathogens in sludge (Sci. Assessment)

WATER QUALITY

Water Quality Research

Budget Request

The Agency requests a total of $24,384,600 supported by 311.7 total workyears for 1987, a decrease of $3,337,100 and a decrease of 10.6 total workyears from 1986. Of the request, $16,884,600 will be for the Salaries and Expenses appropriation and $7,500,000 will be for the Research and Development appropriation, an increase of $765,900 and a decrease of $4,103,000, respectively.

Program Description

This program involves the following objectives:

Objective 1: Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control. This research will provide the scientific base to help states develop site-specific standards and to conduct use-attainability analyses.

Objective 2: Develop the Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Programs. This activity develops and validates protocols needed by EPA for predicting and evaluating impacts from ocean disposal practices. This research program also evaluates, measures and develops predictive tools needed for understanding the distribution of pollutants and resulting effects on water quality and aquatic life through aquatic food chains of the Great Lakes ecosystems. The program also provides critical information for the development of responsive and scientifically valid estuarine programs.

Objective 3: Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology. The wastewater research program provides the technical information and engineering assistance needed by EPA and municipalities for the development and implementation of regulations and guidance for disposal of sludge, and control of pollution from municipal treatment plants to bring plants into compliance with state discharge permits. This program also provides the research in industrial wastewater characterization, control technology, quality assurance and monitoring systems needed to support the National Pollution Discharge Elimination System (NPDES).

SCIENTIFIC ASSESSMENT

1987 Program Request

The Agency requests a total of $685,800 supported by 6.0 total workyears for this program, of which $302,800 will be for the Salaries and Expenses appropriation and $383,000 will be for the Research and Development appropriation. This represents an increase of $13,100 and $297,500, respectively, and no change in total workyears. The increase will support our efforts to expedite the promulgation of sludge regulations under Section 405 of the Clean Water Act (CWA).

Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control. The program will provide support to the program office, Regions and States for update/modification/implementation of human health criteria on a site-specific basis for ambient water quality as well as provide assistance for evaluation of local health hazards from exposure to chemical pollutants and pollutant mixtures. The program will also provide the Office of Water Regulations and Standards with revised ambient water quality criteria and health assessments for 301(g) variance requests.

Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology. The program will provide technical support in the development and implementation of regulations for the management of sludge under Section 405(d) of the CWA as well as provide assistance in the development of criteria for the assessment of hazard and risk from exposure to sludge contaminants including both chemicals and pathogens.

1986 Program

In 1986, the Agency is allocating a total of $375,200 supported by 6.0 total workyears for this program, of which $289,700 is from the Salaries and Expenses appropriation and $85,500 is from the Research and Development appropriation.

The 1986 program is completing methodologies for chemical and pathogen risk assessment criteria in sludge and developing a methodology for preliminary hazard indices for disposal of municipal sludge.

1985 Accomplishments

In 1985, the Agency obligated a total of $361,000 supported by 6.0 total workyears for this program, of which $285,900 was from the Salaries and Expenses appropriation and $75,100 was from the Research and Development appropriation.

In 1985, site-specific health hazard evaluations were performed and water quality criteria modifications developed. A feasibility study for risk assessment of pathogens in sludge was completed and methods and data for calculating hazard indices for chemicals in sludges were developed.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Program Request

The Agency requests a total of $2,744,600 supported by 53.4 total workyears for this program, of which $2,719,600 will be for the Salaries and Expenses appropriation and $25,000 will be for the Research and Development appropriation. This represents an increase of $95,600 and a decrease of $795,400, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects a pilot effort to externalize quality assurance (QA) costs. This effort will involve charging of fees to public and private users for QA services (e.g., quality control check samples).

Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control. Activities will be carried out to develop and standardize methods for assessment of ambient water quality. The program will also provide field tested protocols designed to measure and monitor water quality, evaluate biological monitoring techniques and evaluate a generic approach for the chemical measurement of toxic organics and inorganics in ambient and non-point sources.

Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology. The Discharge Monitoring Report-Quality Assurance (DMRQA) Support Program will be continued to maintain and improve the quality of self-monitoring DMRQA data submitted to the States and EPA by the 7,000 major dischargers within the NPDES. The equivalency program will continue to encourage analytical methods development by the private sector.

1986 Program

In 1986, the Agency is allocating a total of $3,444,400 supported by 53.4 total workyears for this program, of which $2,624,000 is from the Salaries and Expenses appropriation and $820,400 is from the Research and Development appropriation.

In 1986, the Agency is evaluating chemical monitoring methods and field trials of protocols designed to measure site-specific aspects of water quality. In addition, this program provides cost-effective monitoring methods for the measurement of chemicals and biological parameters required in the National Pollution Discharge Elimination System (NPDES) program and in the assessment of ambient water quality.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,442,300 supported by 55.7 total workyears for this program, of which $2,748,300 was from the Salaries and Expenses appropriation and $694,000 was from the Research and Development appropriation.

In 1985, this program published several significant toxicity and virology measurement methods documents such as the Manual on the Measurement of Chronic Toxicity of Effluents to Freshwater Organisms and the Report on Techniques for Assessing Complex Effluents in Receiving Waters.

HEALTH EFFECTS

1987 Program Request

The Agency requests a total of $2,515,400 supported by 27.8 total workyears for this program, of which $1,515,400 will be for the Salaries and Expenses appropriation and $1,000,000 will be for the Research and Development appropriation. This represents an increase of $119,200 and a decrease of $277,000, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects enhancement of the in-house research program. The decrease in Research and Development reflects the completion of the evaluation of toxic effects of chemicals in sludge.

Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control. Health effects bioassays will be field evaluated for use in setting NPDES permits based on protecting human health. These bioassays will be designed to determine quantitatively the potential risk of carcinogenic and target organ effects in humans. A microbial water quality indicator relating the quality of shellfish growing waters to public health problems will be developed.

Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology. Microbiological research data on the level and risk of pathogens that may cause disease in humans will be developed. Data will be provided on the feasibility of conducting an epidemiology project on the effects of sludge distribution and marketing on human health risks.

1986 Program

In 1986, the Agency is allocating a total of $2,673,200 supported by 27.8 total workyears for this program, of which $1,396,200 is from the Salaries and Expenses appropriation and $1,277,000 is from the Research and Development appropriation.

The use of bioassays to develop water quality-based pollution controls are being evaluated in 1986. The Tier I carcinogenesis bioassay is being confirmed and will be used to evaluate the toxicity of several waste streams. Research begun in 1985 to measure microbial indicators in shellfish growing waters is being evaluated in 1986. Evaluations are being completed of the toxicity of major chemicals found in sludge.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,699,700 supported by 24.4 total workyears for this program, of which $1,313,500 was from the Salaries and Expenses appropriation and $1,386,200 was from the Research and Development appropriation.

Several important reports were published which include: A Report on the Health Effects from Land Application of Sludge, a Report on the Health Effects from Exposure to Pathogens in Wastewater Aerosols, and the Health Section of the Technical Support Document for Water Quality Based Toxics Control.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $6,243,000 supported by 40.5 total workyears for this program, of which $2,351,000 will be for the Salaries and Expenses appropriation and $3,892,000 will be for the Research and Development appropriation. This represents an increase of $14,500 and a decrease of 1,056,400, respectively, and a decrease of 2.0 total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects a reduction in industrial and municipal wastewater research due to the completion of several studies. The Agency believes that private industry is now in a position to perform many of the engineering evaluations and studies now provided by EPA.

Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology. More cost-effective treatment will be encouraged by evaluating innovative and alternative technologies. Information will be provided to the Office of Water on sludge management options to support regulation development and implementation by the States. Toxicity reduction evaluation (TRE) procedures and removal capabilities will be developed for the various municipal treatment processes. TRE is used by municipal permitting authorities to assist in issuing discharge permits to industry.

Develop the Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Programs. Methodologies will be developed for measurement, description, movement and dynamics for the removal of metals and problem organics in municipal wastes to be ocean discharged.

1986 Program

In 1986, the Agency is allocating a total of $7,284,900 supported by 42.5 total workyears for this program, of which $2,336,500 is from the Salaries and Expenses appropriation and $4,948,400 is from the Research and Development appropriation.

This program provides the technical information and engineering assistance needed by EPA and municipalities for the development and implementation of regulations for disposal of sludge and innovative control of pollution from municipal treatment plants. The program is also focusing on conducting field validations of the toxicity reduction evaluation methodology (TRE). TRE is being used by municipal permitting authorities to assist in issuing discharge permits to industry.

1985 Accomplishments

In 1985, the Agency obligated a total of $8,259,100 supported by 46.3 total workyears for this program, of which $2,794,300 was from the Salaries and Expenses appropriation and $5,464,800 was from the Research and Development appropriation.

Five emerging technology assessment reports and reports of results on five post-construction evaluations of I/A technologies were provided in support of the sludge management program.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests a total of $11,261,000 supported by 176.0 total workyears for this program, of which $9,561,000 will be for the Salaries and Expenses appropriation and $1,700,000 will be for the Research and Development appropriation. This represents an increase of $742,400 and a decrease of $956,000, respectively, and a decrease of 8.6 total workyears. The increase in Salaries and Expenses reflects enhancement of the in-house research program. The decrease reflects the completion of a number of research projects related to aquatic life water quality criteria, biological integrity and incineration-at-sea.

Develop the Scientific Data to Support a Water Quality Based Approach to Pollution Control. Research will continue to develop methods to determine what uses are attainable in aquatic systems, and to work on integrating pollutant-specific control methods with whole toxicity testing procedures and best available technology (BAT) limits for use in permitting. Through a cooperative agreement we will participate with the People's Republic of China (PRC) in research and exchange information on the environmental processes and effects of pollution on freshwater organisms and water pollution fate and transport models.

Wetlands research will be initiated to study the wetlands values; determine the impact of wetlands on water quality; and assess the cumulative impacts of wetlands loss.

Evaluation of Innovative and Alternative (I/A) Technologies, Sludge Management Alternatives and Toxicity Reduction Methods and Technology. Research will continue to maintain and update the existing tape library and develop new analytical data bases of toxic pollutants found in wastewater.

Develop the Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Programs. Hazard assessment protocols will be validated to assess better the impact of deep water ocean disposal. A multimedia risk assessment for dredged material will be completed and used in evaluating disposal options. A report will be completed on the transformation and fate of whole effluent toxicity which will be used in conducting wasteload allocations in estuaries.

1986 Program

In 1986, the Agency is allocating a total of $11,474,600 supported by 184.6 total workyears for this program, of which $8,818,600 is from the Salaries and Expenses appropriation and $2,656,000 is from the Research and Development appropriation.

Hazard assessment protocols to assess better the impact of ocean disposal of wastes are being developed in 1986. Research on the marine component of a cross-media risk assessment is beginning.

1985 Accomplishments

In 1985, the Agency obligated a total of $10,275,900 supported by 157.7 total workyears for this program, of which $8,486,300 was from the Salaries and Expenses appropriation and $1,789,600 was from the Research and Development appropriation.

In 1985 the major accomplishments included the development of aquatic life water quality criteria documents for aluminum, cyanide, lead, mercury, cadmium, copper, ammonia, chlorine and arsenic. Effects and exposure assessment procedures were evaluated to determine the applicability of these procedures for use in a dredged material disposal hazard assessment.

GREAT LAKES

1987 Program Request

The Agency requests a total of $934,800 supported by 8.0 total workyears for this program, of which $434,800 will be for the Salaries and Expenses appropriation and $500,000 will be for the Research and Development appropriation. This represents a decrease of $218,900 and $1,315,700, respectively, and no change in total workyears. The decrease reflects the completion of several studies on the effects of toxic pollutants along chemical gradients.

Develop the Scientific Data Needed to Support Environmentally Sound Ocean Disposal, Estuarine and Great Lakes Programs. Research will continue to develop and test methods to measure, describe and predict the sources, distribution, movement, dynamics and effects of organic toxic substances in Great Lakes areas of concern. A report will be completed on the acute and chronic toxicity of dioxin, furans and related compounds of concern in the Great Lakes. This program will also provide the International Joint Commission, Great Lakes National Program Office, Regions II, III and V and Great Lakes States with technical support and research data related to activities under the US/Canada Water Quality Agreement.

1986 Program

In 1986, the Agency is allocating a total of $2,469,400 supported by 8.0 total workyears for this program, of which $653,700 is from the Salaries and Expenses appropriation and $1,815,700 is from the Research and Development appropriation.

The 1986 program is focusing on the impact and fate of toxic materials in areas of concern identified by the Great Lakes Water Quality Board. Emphasis is on in-place pollutant and chemical mass balance research.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,311,800 supported by 10.0 total workyears for this program, of which $970,400 was from the Salaries and Expenses appropriation and $1,341,400 was from the Research and Development appropriation.

In 1985, this program prepared documentation manuals for a three dimensional physical transport model and a three dimensional hydrodynamic model for use in the Great Lakes.

WATER QUALITY

Comprehensive Estuarine Management

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Comprehensive Estuarine Management								
Research & Development		$3,962.5						
	TOTAL	$3,962.5						
TOTAL:								
Research & Development		$3,962.5						
Comprehensive Estuarine Management	TOTAL	$3,962.5						

WATER QUALITY

Comprehensive Estuarine Management

1987 Program Request

The Agency requests no resources for this activity in 1987. This program is supported under the Water Quality Monitoring and Analysis subactivity in the Abatement and Control function.

1986 Program

The Agency is allocating no resources under this subactivity for 1986. This program is supported under the Water Quality Monitoring and Analysis subactivity in the Abatement and Control function.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,962,500, all of which was from the Research and Development appropriation.

The Agency, in coordination with NOAA, assisted State and local agencies dealing with Long Island Sound, Narragansett Bay, Buzzards Bay, and Puget Sound during 1985 in the formulation of work programs to carry out studies to determine wasteload sources and characteristics, to locate and quantify nutrient and toxic problem areas, and to identify the management and data needs for the design of control and abatement programs.

On the basis of nutrient and toxics abatement experiences gained in the Chesapeake Bay Program and the Great Lakes program, the Agency developed a national estuarine policy and generic estuarine program guidance document for use by State and local officials in program design and implementation.

Workyear support for this program is described under the Water Quality Monitoring and Analysis subactivity.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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WATER QUALITY

Water Quality And Grants Program Management

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Water Quality Management								
Salaries & Expenses		$3,563.5	$3,722.9	$3,723.1	-$160.0	$3,563.1	$3,783.6	$220.5
Abatement Control and Compliance		$224.6	$180.0	$180.0	-$7.7	$172.3	$171.0	-$1.3
	TOTAL	$3,788.1	$3,902.9	$3,903.1	-$167.7	$3,735.4	$3,954.6	$219.2
Great Lakes Program								
Salaries & Expenses		$1,124.5	$1,071.8	$1,071.8	-$46.2	$1,025.6	$1,073.9	$48.3
Abatement Control and Compliance		$5,413.7	$3,897.3	$3,897.3	-$167.6	$3,729.7	$3,697.3	-$32.4
	TOTAL	$6,538.2	$4,969.1	$4,969.1	-$213.8	$4,755.3	$4,771.2	$15.9
Chesapeake Bay Program								
Salaries & Expenses		$899.4	$839.7	$839.7	-$36.2	$803.5	$857.3	$53.8
Abatement Control and Compliance		$12,507.9	$9,250.0	$9,250.0	-$397.8	$8,852.2	$9,250.0	$397.8
	TOTAL	$13,407.3	$10,089.7	$10,089.7	-$434.0	$9,655.7	$10,107.3	$451.6
TOTAL:								
Salaries & Expenses		$5,587.4	$5,634.4	$5,634.6	-$242.4	$5,392.2	$5,714.8	$322.6
Abatement Control and Compliance		$18,146.2	$13,327.3	$13,327.3	-$573.1	$12,754.2	$13,118.3	$364.1
Water Quality And Grants Program Management	TOTAL	$23,733.6	$18,961.7	$18,961.9	-$815.5	$18,146.4	$18,833.1	$686.7

WATER QUALITY

Water Quality And Grants Program Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Water Quality Management	67.7	69.4	69.8		69.8	71.8	2.0
Great Lakes Program	17.4	15.8	18.0		18.0	18.0	
Chesapeake Bay Program	4.7	9.5	8.6		8.6	8.6	
TOTAL PERMANENT WORKYEARS	89.8	94.7	96.4		96.4	98.4	2.0
TOTAL WORKYEARS							
Water Quality Management	73.3	76.6	76.6		76.6	76.6	
Great Lakes Program	21.7	20.0	20.0		20.0	20.0	
Chesapeake Bay Program	8.1	10.0	10.0		10.0	10.0	
TOTAL WORKYEARS	103.1	106.6	106.6		106.6	106.6	

WATER QUALITY

Water Quality and Grants Program Management

Budget Request

The Agency requests a total of $18,833,100 supported by 106.6 workyears for 1987, an increase of $686,700 and no change in total workyears for 1987. Of the request, $5,714,800 is for the Salaries and Expenses appropriation and $13,118,300 is for the Abatement, Control and Compliance appropriation, an increase of $322,600 and a decrease of $364,100, respectively.

Program Description

The program areas under this subactivity include:

Water Quality Management -- This program includes management of State financial assistance under Sections 106, 205(g) (nonconstruction grants management), 205(j), 208, and 303 of the Clean Water Act. Proposed Administration amendments to the Clean Water Act eliminate new funding under 205(j) after October 1, 1985, and restrict use of 205(g) money. The nonpoint source (NPS) program encourages other Federal agencies to support development of cost-effective State and local programs to control nonpoint sources of pollution in priority waters.

Great Lakes Program -- This program provides assistance in implementing U.S. programs in support of the U.S. - Canada Great Lakes Water Quality Agreement. A major focus of the program is the measurement of ambient conditions in the Great Lakes in order to determine compliance with the objectives of the Agreement. The monitoring portions of the program measure water quality trends and the effectiveness of remedial responses to emerging pollution problems.

Chesapeake Bay Program -- As a result of the Chesapeake Bay Water Quality Study, the Agency is committing significant resources to restore Bay water quality. The Agency is assisting the Bay States and the District of Columbia in implementing activities to control nutrient and toxic effects in the Bay. In addition to maintaining the Bay Liaison Office in Annapolis, the Agency will provide cost sharing grant assistance to the States for implementing nutrient and toxic controls. The Agency conducts detailed monitoring and modeling studies to assist in the cleanup effort.

WATER QUALITY MANAGEMENT

1987 Program Request

The Agency requests a total of $3,954,600 supported by 76.6 total workyears for this program, of which $3,783,600 will be for the Salaries and Expenses appropriation and $171,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $220,500 and a decrease of $1,300, respectively, with no change in total workyears. The increase in Salaries and Expenses reflects increased operating costs.

EPA will continue to negotiate and manage grants which specify the performance expected by the States, commonly known as performance-based grants. This will include negotiating and tracking annual program priorities and work commitments to ensure that Federal and State funds are meeting priority point and nonpoint source control needs. EPA will work with selected States to analyze priority waterbody lists and conduct workshops on using the lists to focus grant resources on critical water quality problems. Although EPA expects all pre-1985 Level of Effort (LOE) deficits to be repaid by the end of 1987, Regional oversight will continue to assure that LOE deficit problems do not reoccur. Headquarters will conduct five workshops with the Regions to ensure that grant work programs are effectively coordinated to improve management of grant funds. The guidance on grant financial management will be updated. The program will continue to provide positions for Water Management Division Directors.

Grants totaling $52,100,000, a decrease of $10,009,300 from 1986, are being requested for award under Section 106 of the Clean Water Act to support State and Interstate Water Pollution Control programs. EPA will target the funds to compliance and enforcement of pretreatment programs; issuance/ reissuance of permits including Best Available Technology (BAT) and water quality-based permits for toxics control; development of groundwater protection strategies and programs; and continue Publicly Owned Treatment Works (POTW) compliance under the National Municipal Policy. Limited funding for management of nonpoint source controls in high priority basins also will be made.

The Administration has proposed major revisions to Section 205(j) of the Clean Water Act which authorizes various planning activities. These revisions would discontinue funding under 205(j) after October 1, 1985. No funds are requested for 1987.

EPA will build on intra- and interagency planning in 1985 and 1986 for control of nonpoint source pollution primarily from agriculture and silviculture. This includes negotiating and assuring implementation of new Memoranda of Understanding (MOU) that direct existing resources and programs of three other Federal agencies to expand the use of NPS controls. The U.S. Departments of Agriculture and Defense and the Bureau of Land Management are the key agencies EPA will work with during 1987. EPA staff will also work to assure that Federal field programs directly assist specific State and local NPS implementation projects in priority waters. This assistance will include training of State and local water quality staff and landowners in the design and implementation of NPS controls such as reduced tillage methods and pesticide/nutrient management.

1986 Program

In 1986, the Agency is allocating a total of $3,735,400 supported by 76.6 workyears for this program, of which $3,563,100 is for the Salaries and Expenses appropriation and $172,300 is for the Abatement, Control and Compliance appropriation.

EPA's ongoing focus is to coordinate Federal and State water quality priorities and programs. The primary objectives in 1986 are to complete development of State procedures for instituting waterbody priorities as a means to focus State resources on critical problems. Final policy on State preparation and use of priority waterbodies to focus 106 funding will be issued and a series of workshops held. Review of grant applications and mid/end-of-year program reviews will emphasize financial management of grants. The automated information system will be operational in the Regions in 1986 for tracking actual outputs of the States against their commitments. The system will also assist EPA in conducting program reviews.

During 1986, the States, with EPA's assistance, will use the State-by-State assessment to identify and fill data gaps, to rank nonpoint source problems and develop management programs in selected priority waters. EPA's ongoing interagency effort to target existing Federal resources will continue with USDA on agriculture-related NPS problems, and to a lesser extent, on silviculture-related problems.

1985 Accomplishments

In 1985, the Agency obligated $3,788,100 supported by 73.3 total workyears for this program, of which $3,563,500 was from the Salaries and Expenses appropriation and $224,600 was from the Abatement, Control and Compliance appropriation. The focus for this program in 1985 has been on technical assistance to States for complying with requirements of Section 106 grants and to Regions on management of 106/205(j) grants.

Assistance to States included providing direct advice to determine LOE for four States, issuing guidance documents on complying with 106 requirements, and developing a policy on performance-based 106/205(j) grants for all States. Assistance was provided to the Regions through workshops on strengthening management of 106/205(j) grants and developing an automated information system to improve Regional grants management.

In 1985, EPA convened a Federal/State/Local Nonpoint Source Task Force which recommended a National Policy and developed individual Agency and Regional Strategies to ensure implementation of NPS practices to address priority problems. EPA received a report from the States providing the first State-by-State documentation of NPS problems, the status of State NPS programs and a description of successful control approaches.

GREAT LAKES PROGRAM

1987 Program Request

The Agency requests a total of $4,771,200 supported by 20.0 total workyears for this program, of which $1,073,900 will be for the Salaries and Expenses appropriation and $3,697,300 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $48,300 and a decrease of $32,400, respectively, with no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of the government-wide deficit reductions. The decrease in Abatement, Control and Compliance reflects improvements in data management.

The Great Lakes National Program Office (GLNPO) will continue to provide leadership in meeting the U.S. obligations under the 1978 Great Lakes Water Quality Agreement with Canada and under the 1983 Phosphorus Control supplementary agreement, and will continue to support the activities of the International Joint Commission (IJC). It will be responding to information requests and providing technical assistance to Headquarters and the State Department on official Canadian requests and notes concerning U.S. Great Lakes policies. Staff support to the IJC's Water Quality Board and its committees will continue to ensure that U.S. views and policies are adequately represented. GLNPO will provide any required technical support in the reconsideration or renegotiation of the Water Quality Agreement anticipated to begin in 1986.

The Program will continue its work on Great Lakes monitoring planning and programming as required by Annex 11 of the Water Quality Agreement with Canada. Surveys of the Lakes will be conducted in cooperation with State and Canadian agencies to determine the annual variability of ambient phosphorus concentrations and the levels and trends in metals and conventional pollutant parameters. A surveillance program to detect toxic substances in Great Lakes fish and sediments will be continued for the tributaries and harbors. The results will be analyzed and reported to the States for regulatory follow-up.

The results of the monitoring activities, including water, fish, sediment, and atmospheric deposition data, will provide the information necessary to assess compliance with the Water Quality Agreement objectives, to evaluate effectiveness of control programs, and to identify emerging problems. Attention in sediment sampling will continue to be focused on the problem of polluted sediment in the 30 U.S. "Areas of Concern" identified by the Water Quality Board. Remedial action plans will be completed for the remaining 25 areas and alternative abatement technologies will be identified and evaluated. The Upper Great Lakes Connecting Channels (the Detroit and St. Clair Rivers and the St. Marys River) final report will be published to provide needed information on sediments and on toxics transport.

The U.S. Phosphorus Reduction Plan, submitted to the IJC in 1986 for Lakes Erie and Ontario, will be revised and updated based on plan implementation activities by the States, which are being carried out with GLNPO oversight and assistance.

GLNPO will begin the assessment of toxic pollutant sources, including draft assessments of ground water and pesticide sources, as a basis for the development of a mass balance for toxics.

1986 Program

The Agency is allocating a total of $4,755,300 supported by 20.0 total workyears for this program, of which $1,025,600 is from the Salaries and Expenses appropriation and $3,729,700 is from the Abatement, Control and Compliance appropriation.

GLNPO is continuing to conduct a wide range of monitoring activities and laboratory analysis with particular emphasis on in-place toxics and atmospheric deposition of toxics. The second and final season of monitoring work, including water and sediment sampling, for the Upper Great Lakes Connecting Channels Study is being completed and a draft final report is to be written.

The U.S. is reviewing the Phosphorus Reduction Plan called for in the 1983 Phosphorus Control Supplement to Annex 3 of the Water Quality Agreement. The final review is to be completed prior to the plan's submittal to the International Joint Commission.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,585,100 supported by 21.7 total workyears for this program, of which $1,124,500 was from the Salaries and Expenses appropriation and $5,413,700 was from the Abatement, Control and Compliance appropriation.

The Upper Great Lakes Connecting Channels Study continued during 1985. This year was the first of two field seasons of the bi-national ecosystem analysis during which sampling of the connecting channels' water and sediment was conducted. The National Oceanographic and Atmospheric Administration and the Fish and Wildlife Service contributed to the effort.

In 1985, the U.S. prepared the first draft of the U.S. Phosphorus Reduction Plan called for in the 1983 Phosphorus Control Supplement to Annex 3 of the Water Quality Agreement. The U.S. planning has been based on State plans developed by Indiana, Michigan, Ohio, Pennsylvania and New York with the assistance of the GLNPO. In addition, negotiations with Canada were completed to allocate the additional phosphorus load reduction needed for Lake Ontario.

GLNPO continued its sampling network and laboratory activities. Water chemistry, biota, sediment, and air analyses that are required by the Water Quality Agreement were carried out. This work was used as the basis for the Biennal Report on Great Lakes Water Quality completed in 1985. In addition, new water quality surveillance plans for the individual lakes were completed during the year.

CHESAPEAKE BAY PROGRAM

1987 Program Request

The Agency requests a total of $10,107,300 supported by 10.0 workyears for this program of which $857,300 will be for the Salaries and Expenses appropriation and $9,250,000 will be for the Abatement, Control, and Compliance appropriation. This represents an increase of $53,800 and $397,800 respectively, with no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of the government-wide deficit reductions. The increase in Abatement, Control and Compliance reflects expanding monitoring and computer modeling needs.

In 1987, the Agency will continue working with the Bay States on the use of grant funds to update and implement the elements of the Bay Restoration and Protection Plan begun during FY 1986. Of importance will be matching grants for the implementation of the nonpoint source control plan elements, including those in identified critical areas. In addition the focus of assistance to the States will include integration of point source controls to improve abatement and permit reviews to improve compliance rates. Water quality monitoring of pilot areas will be used in conjunction with water quality models to evaluate results of Best Management Practices (BMP) implementation and to develop quantitative relationships between waste removal from the Bay and improvement of water quality.

Following the update of the 1980 Bay watershed model to 1985, it will be used with the two dimensional steady-state model to determine dissolved oxygen and nutrient levels. Complementing this work will be the continuing development of a three dimensional time-variable model for developing waste load allocations.

The Agency will continue to provide technical and administrative staff support to the Chesapeake Bay Implementation Committee and Executive Council. Coordination functions will be carried out with the States, other Federal Agencies, and other Bay management agencies to ensure continued progress is made in restoring Bay water quality. The Agency's support for monitoring the mainstem of the Bay will continue in concert with the States' focus on the major tributaries. Continued support will be provided for maintaining and improving the Chesapeake Bay data system.

1986 Program

The Agency is allocating a total of $9,655,700 supported by 10.0 total workyears for this program, of which $803,500 is from the Salaries and Expenses appropriation and $8,852,200 is from the Abatement, Control and Compliance appropriation.

During 1986, the Agency is awarding demonstration grants to the Bay States to implement the recommendations of the Chesapeake Bay Restoration and Protection Plan of 1985. These 50 percent cost sharing grants emphasize nonpoint source control efforts and will be targeted on projects which support the long-term need for reducing loadings of toxics and nutrients. Assistance is being primarily provided to identify critical farm units within the sub-basins, develop plans and schedules for implementing Best Management Practices, define outreach programs to encourage farmer participation, and develop long-term comprehensive implementation programs. The objective is to demonstrate the effectiveness of Best Management Practices, in critical areas so that more farmers will adopt the practices.

Under the policy direction of the Executive Council and the guidance of the Implementation Committee and its five subcommittees, the staff of the Chesapeake Bay Liaison office is framing management strategies reflecting both point and nonpoint source controls. It is also overseeing contracts for the construction of computer models that will help establish quantitative relationships between waste loads and Bay water quality. Data establishing these relationships is being provided by historical data, collected during the research phase of the Bay Program, and by data being collected through special data searches and by carefully targeted water quality monitoring programs.

The Chesapeake Bay Liaison Office is coordinating the activities with other Federal agencies engaged in the Bay program and is sponsoring programs to inform citizen groups of Bay problems and efforts underway to address them.

1985 Accomplishments

In 1985, the Agency obligated a total of $13,407,300 supported by 8.1 total workyears for this program, of which $899,400 was from the Salaries and Expenses appropriation and $12,507,900 was from the Abatement, Control and Compliance appropriation.

This was the first year of a four year Administration commitment to carry out cost sharing grants in the program. Cost sharing grants were targeted at reducing the loadings of nutrients and toxics in critical sub-basins in the Bay States.

The efforts of the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, the Corps of Engineers, the U.S. Department of Agriculture, and the Fish and Wildlife Service of the Department of the Interior were coordinated through the Liaison Office.

Other activities of the Liaison Office included complementing the tributary monitoring activities of the States by supporting the monitoring of the Bay's mainstem; refining the water quality model to assess the impact of alternative control options; and maintaining the program's computer center, which stores the program's extensive data base. The Chesapeake Bay Restoration and Protection Plan was completed in September of 1985 and is being used to set the stage for future years efforts.

WATER QUALITY

Effluent Standards & Guidelines

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Effluent Standards & Guidelines								
Salaries & Expenses		$3,925.0	$3,699.4	$3,667.4	-$157.6	$3,509.8	$2,774.6	-$735.2
Abatement Control and Compliance		$5,320.5	$4,400.0	$4,400.0	-$189.2	$4,210.8	$3,462.4	-$748.4
	TOTAL	$9,245.5	$8,099.4	$8,067.4	-$346.8	$7,720.6	$6,237.0	-$1,483.6
TOTAL:								
Salaries & Expenses		$3,925.0	$3,699.4	$3,667.4	-$157.6	$3,509.8	$2,774.6	-$735.2
Abatement Control and Compliance		$5,320.5	$4,400.0	$4,400.0	-$189.2	$4,210.8	$3,462.4	-$748.4
Effluent Standards & Guidelines	TOTAL	$9,245.5	$8,099.4	$8,067.4	-$346.8	$7,720.6	$6,237.0	-$1,483.6
PERMANENT WORKYEARS								
Effluent Standards & Guidelines		67.3	66.9	66.9		66.9	47.0	-19.9
TOTAL PERMANENT WORKYEARS		67.3	66.9	66.9		66.9	47.0	-19.9
TOTAL WORKYEARS								
Effluent Standards & Guidelines		74.1	71.0	71.0		71.0	50.0	-21.0
TOTAL WORKYEARS		74.1	71.0	71.0		71.0	50.0	-21.0

WATER QUALITY

Effluent Standards and Guidelines

Budget Request

The Agency requests a total of $6,237,000 supported by 50.0 total workyears for 1987, a decrease of $1,483,600 and 21.0 total workyears from 1986. Of the request, $2,774,600 will be for the Salaries and Expenses appropriation and $3,462,400 will be for the Abatement, Control and Compliance appropriation, a decrease of $735,200 and $748,400, respectively.

Program Description

Effluent Standards and Guidelines -- This program includes establishing effluent limitations for industries discharging directly to waterways and indirectly through Publicly Owned Treatment Works (POTWs). Effluent standards and guidelines are promulgated under the authority of Sections 301, 304, 306, 307, and 501 of the Clean Water Act. Through this program, the Agency establishes a number of different kinds of effluent standards and guidelines.

Best Available Technology Economically Achievable (BAT) limitations generally represent the best existing performance in the industrial category or subcategory. The Act establishes BAT as the principal national means of controlling the direct discharge of toxics and nonconventional pollutants into navigable waters. Best Conventional Pollution Control Technology (BCT), the basis for limiting discharges of conventional pollutants from existing sources, is not an additional limitation, but replaces BAT for the conventional pollutants. New Source Performance Standards (NSPS) are based on the best available demonstrated technology. Pretreatment Standards for Existing Sources (PSES) are designed to prevent the discharge of pollutants which pass through, interfere with, or are otherwise incompatible with the POTW's treatment process or chosen sludge disposal method. The similar regulation for new plants is Pretreatment Standards for New Sources (PSNS).

The Act required the achievement by July 1, 1984 of effluent limitations requiring application of BAT for non-conventional pollutants and classes of pollutants which Congress declared toxic under Section 307(a) of the 1972 Act. Likewise, NSPS and pretreatment standards were redirected toward toxic pollutant controls.

EFFLUENT STANDARDS AND GUIDELINES

1987 Program Request

The Agency requests a total of $6,237,000 supported by 50.0 total workyears for this program, of which $2,774,600 will be for the Salaries and Expenses appropriation and $3,462,400 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $735,200 and $748,400, respectively, and a decrease of 21.0 total workyears. The decrease in both appropriations and in total workyears reflect the Agency's progress in developing effluent standards and guidelines.

In 1987, the program will continue analyses of eight unregulated industries with known toxic discharges to determine the need for regulation and/or guidance for Regional and State permit writers. The program will review two regulated categorical industries discharging large amounts of toxic pollutants. Priorities for these industries are based on the results from the Resource Conservation and Recovery Act (RCRA) Section 3018, Domestic Sewage Study, discussions with permit writers and municipalities and an EPA environmental management study. The program will promulgate BAT regulations for gold placer mining, and for volatile toxics in the pesticide category, and will issue final rules for Best Conventional Technology on the remaining reserved primary industry categories.

The program will provide engineering, economic, and statistical support to post-promulgation negotiation, litigation, remand/repair, and petition review efforts, as needed, to defend the guidelines. The Agency reviews petitions filed by outside groups with the courts and attempts to resolve issues out of court. Some are successfully resolved; others are litigated, which may require the Agency to respond to court remands. In 1987, the program expects post-promulgation support to continue on nine categories.

The program will continue to provide technical assistance, including engineering, economic and statistical support for Regional and State permit writers, through approximately 20 workshops, and will provide data on industrial pollutant discharges, treatment technologies and wastewater characteristics as needed. The program will perform the engineering, environmental, and associated activities for responding to variance requests, with an emphasis on Fundamentally Different Factors (FDF) and 301(g) variances referred by the Regional Offices.

1986 Program

In 1986 the Agency is allocating a total of $7,720,600 supported by 71.0 total workyears for this program, of which $3,509,800 is from the Salaries and Expenses appropriation and $4,210,800 is from the Abatement, Control and Compliance appropriation.

The program is promulgating BAT regulations for the foundries, and the organic chemicals, plastics and synthetic fibers category; and issuing final BCT rules on pharmaceuticals, pulp and paper, and the secondary industries.

The program will conduct site visits and engineering evaluations on four non-regulated categories studied in 1985: ferroalloy manufacturing facilities, hazardous waste treatment facilities, hospitals, and the transportation industry; and will begin to update effluent data on solvent barrel and oil reclaimers and industrial laundries. The program will also evaluate additional regulated industries discharging large amounts of toxic pollutants. These analyses will be used to determine the need for the issuance of regulations or guidance documents to assist permit writers in controlling toxic discharges.

The program will continue to emphasize engineering, economic and statistical support to Regional and State permit writers in reissuing expired permits which will incorporate BAT. The program is conducting additional workshops on permit issuance and application of effluent regulations, including compliance assistance for small businesses in the foundry industry. Other efforts include issuance of guidance manuals to assist in implementing categorical pretreatment standards for enforcing toxic pollutant control on industrial dischargers to Publicly Owned Treatment Works (POTWs); writing new source discharge permits; responding to variances and evidentiary hearings; and assisting States in reducing their major and minor permit backlogs.

Post-promulgation support will continue on ten contested regulations, including negotiations, litigation support activities, and proposed or final amendments to categorical regulations.

1985 Accomplishments

In 1985, the Agency obligated a total of $9,245,500 supported by 74.1 total workyears for this program, of which $3,925,000 was from the Salaries and Expenses appropriation and $5,320,500 was from the Abatement, Control and Compliance appropriation.

The program promulgated effluent standards and guidelines for 4 industries on court-ordered schedules; nonferrous metals forming, nonferrous metals (phase II), plastics molding and forming, and pesticides. Extensive development work was completed for final regulations for the organic chemicals and plastics and synthetic fibers category. The program also proposed regulations for offshore oil and gas production.

Post-promulgation negotiations support took place in 1985 on eight contested regulations, including negotiations for five settlements. Additional support activities involved proposal and/or promulgation of settlement agreement regulations on five categories, and litigation support for two categories.

In conjunction with the Office of Water Enforcement and Permits, the program provided engineering, economic, and statistical support to Regional and State permit writers through 13 technical workshops and seminars for Regional, State, and industry representatives. The program also reviewed draft permit reports and assisted the States on Best Professional Judgment (BPJ) issues for the coal remining category by developing an economic/environmental model for use by permit writers.

The program completed literature and record reviews of four non-regulated industries identified as major dischargers of toxic pollutants by the Domestic Sewage Study required under RCRA Section 3018, and by the Regions and EPA's Integrated Environmental Management Program: ferroalloy manufacturing facilities, hazardous waste treatment facilities, hospitals, and the transportation industry. The program also began evaluating five regulated industries discharging large amounts of highly toxic pollutants to determine the need for issuance of regulations or guidance documents to assist permit writers. These categories included paint, ink, onshore and coastal oil and gas, and textiles.

WATER QUALITY

Grants Assistance Programs

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Clean Lakes Program								
Abatement Control and Compliance		$5,000.0		$5,000.0	-$215.0	$4,785.0		-$4,785.0
	TOTAL	$5,000.0		$5,000.0	-$215.0	$4,785.0		-$4,785.0
Control Agency Resource Supplementation (Section 106)								
Abatement Control and Compliance		$61,313.4	$64,900.0	$64,900.0	-$2,790.7	$62,109.3	$52,100.0	-$10,009.3
	TOTAL	$61,313.4	$64,900.0	$64,900.0	-$2,790.7	$62,109.3	$52,100.0	-$10,009.3
Training Grants (Section 104)								
Abatement Control and Compliance		$216.0		$250.0	-$10.8	$239.2		-$239.2
	TOTAL	$216.0		$250.0	-$10.8	$239.2		-$239.2
TOTAL:								
Abatement Control and Compliance		$66,529.4	$64,900.0	$70,150.0	-$3,016.5	$67,133.5	$52,100.0	-$15,033.5
Grants Assistance Programs	TOTAL	$66,529.4	$64,900.0	$70,150.0	-$3,016.5	$67,133.5	$52,100.0	-$15,033.5

WATER QUALITY

Grants Assistance Programs

Budget Request

The Agency requests a total of $52,100,000 for grants under the Abatement, Control and Compliance Appropriation for 1987, a decrease of $15,033,500 from 1986.

Program Description

The program areas under this subactivity include:

Clean Lakes Program -- Section 314 of the Clean Water Act sets forth the principal administrative and technical requirements for developing a national program to enhance the quality of freshwater lakes. The Clean Lakes regulation in February, 1980 established an operational program of financial and technical assistance to the States to assist them in implementing methods and procedures to protect and restore the quality of their publicly owned freshwater lakes.

Control Agency Resource Supplementation (Section 106) -- Section 106 grants supplement State resources for water pollution control programs. They are negotiated annually with 50 States, 7 Territories, and 6 Interstate compact agencies. Funds are used to carry out a wide range of water quality programs, including permit issuance, enforcement, monitoring, construction grants management, water quality planning and standards, wasteload allocations, nonpoint source control program management, pretreatment, oil and hazardous materials spill response, and other priority programs.

States also receive financial assistance for water quality program activities under Sections 205(g) and 205(j) of the Clean Water Act as reserves from their annual Construction Grants allotment under the Construction Grants appropriation. Funding is provided under Section 205(g) for construction grants management in delegated States and under Section 205(j) for water quality planning and standards activities. Proposed Administration amendments will eliminate new funding under Section 205(j) after October 1, 1985, and restrict use of 205(g) grants.

Training Grants (Section 104) -- These grants provide training assistance to institutions of higher education and other public or private agencies and institutions to meet professional manpower needs.

CLEAN LAKES PROGRAM

1987 Program Request

In 1987, the Agency requests no funds for the Clean Lakes program. In past years the Agency has developed and demonstrated lake restoration techniques and assisted States in classifying lakes, identifying techniques for restoring the level of water quality needed to maintain or enhance uses, and implementing cleanup and control projects. Since the Agency has provided guidance to the States on maintaining clean lakes, it believes that the States are now able to address lake restoration needs, along with other local priorities, under their existing water quality management programs.

1986 Program

In 1986, the Agency is allocating a total of $4,785,000 under the Abatement, Control and Compliance appropriation for grants for the Clean Lakes program. The funds provided are being used only for existing projects with an emphasis on those projects which can be completed with 1986 funds. The Agency expects to award 25 grants for improving conditions in publicly owned freshwater lakes.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,000,000 from the Abatement, Control and Compliance appropriation under the Clean Lakes program to help complete 30 existing projects.

CONTROL AGENCY RESOURCE SUPPLEMENTATION (SECTION 106)

1987 Program Request

The Agency requests a total of $52,100,000 under the Abatement, Control and Compliance appropriation, a decrease of $10,009,300. This decrease reflects State progress in reducing major permit backlogs, in approving local pretreatment programs, and in developing State groundwater strategies.

Section 106 grants will provide funding assistance for operation of joint Federal/State water pollution control programs for 63 State, interstate, and territorial agencies. This grant will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs. States are expected to continue to issue industrial permits for Best Available Technology (BAT), municipal permits and water quality-based permits for toxics control. Continued emphasis in 1987 is anticipated for activities to improve compliance by dischargers with their National Pollutant Discharge Elimination System (NPDES) permits and on enforcement of pretreatment programs. To this end, a total of 416 major permits are expected to be issued or reissued by the States and 2243 compliance inspections at major facilities are expected to be conducted. Additionally, funds are expected to be devoted to assisting States as they develop and/or implement groundwater protection strategies and programs. A limited amount of Section 106 funds are expected to be devoted to management of nonpoint source programs in high priority basins.

1986 Program

In 1986, the Agency is allocating $62,109,300 for Section 106 grants under the Abatement, Control and Compliance appropriation.

Assistance to the States in 1986 is emphasizing issuance of industrial permits for Best Available Technology (BAT) and municipal permits, especially for major facilities. Because of the major potential for water quality impairment and sludge contamination, the focus will also be on improving compliance of Publicly Owned Treatment Works (POTWs), especially those required to administer pretreatment programs under the National Municipal Policy. Over 1,000 major NPDES permits will be issued or reissued by the States, which should work toward elimination of the NPDES States' major permit backlog, and approximately 6,300 compliance inspections of majors will be conducted. EPA expects one additional State to accept NPDES permitting authority in 1986.

States and territories will develop groundwater protection strategies or, where States have strategies, support State groundwater program development and implementation activities. Remaining Section 106 funds will be used to fund other negotiated priority State program management needs such as nonpoint source program implementation. Also, some priority planning, ambient and source standards, and monitoring of toxic and conventional pollutants will continue to be funded.

1985 Accomplishments

In 1985, the Agency obligated $61,313,400 for Section 106 grants under the Abatement, Control, and Compliance appropriation. Several States have developed NPDES program modifications to assume pretreatment, Federal facility, and general permitting responsibilities. Thirty-seven States had approved NPDES programs and States had 1,278 approved municipal/pretreatment programs in 1985.

Approximately 1800 major NPDES permits including toxics controls, were issued or reissued by the States. Nearly 6,000 compliance inspections of majors were conducted, and the States took increasing responsibility in compliance activities. States developed analytical capabilities to support increased emphasis on water quality-based permitting, toxics control, and requests for permit variances.

Finally, almost all States were developing or implementing groundwater management plans based on guidance published in early 1985, and twenty-five States used Section 106 grants to manage nonpoint source programs.

TRAINING GRANTS (SECTION 104)

1987 Program Request

The Agency requests no funds for these grants in 1987. The Agency believes that sufficient interest and opportunities exist for people to enter environmental professions without Federal support.

1986 Program

The Agency is allocating $239,200 from the Abatement, Control and Compliance appropriation to support graduate level academic training in environmental sciences and engineering at 27 universities.

1985 Accomplishments

In 1985, the Agency obligated $216,000 from the Abatement, Control and Compliance appropriation for training grants. These funds were used to support graduate level academic training in environmental sciences and engineering at 27 universities.

WATER QUALITY

Water Quality Strategies Implementation

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Dredge and Fill								
Salaries & Expenses		$2,632.3	$3,116.7	$2,930.8	-$126.0	$2,804.8	$2,944.5	$139.7
Abatement Control and Compliance		$471.9	$1,653.3	$1,653.3	-$71.1	$1,582.2	$1,653.3	$71.1
	TOTAL	$3,104.2	$4,770.0	$4,584.1	-$197.1	$4,387.0	$4,597.8	$210.8
Ocean Disposal Permits								
Salaries & Expenses		$2,061.3	$2,134.2	$2,168.2	-$93.1	$2,075.1	$2,491.9	$416.8
Abatement Control and Compliance		$2,130.5	$6,797.2	$6,797.2	-$292.2	$6,505.0	$6,579.2	$74.2
	TOTAL	$4,191.8	$8,931.4	$8,965.4	-$385.3	$8,580.1	$9,071.1	$491.0
Environmental Emergency Response & Prevention								
Salaries & Expenses		$1,707.2	$2,781.7	$2,546.7	-$109.7	$2,437.0	$2,587.4	$150.4
Abatement Control and Compliance		$1,633.7	$1,848.0	$1,948.0	-$83.8	$1,864.2	$1,848.0	-$16.2
	TOTAL	$3,340.9	$4,629.7	$4,494.7	-$193.5	$4,301.2	$4,435.4	$134.2
Standards & Regulations								
Salaries & Expenses		$4,085.4	$4,349.0	$4,347.5	-$187.1	$4,160.4	$4,130.7	-$29.7
Abatement Control and Compliance		$2,364.2	$2,515.3	$2,515.3	-$109.2	$2,407.1	$2,165.3	-$241.8
	TOTAL	$6,449.6	$6,864.3	$6,862.8	-$295.3	$6,567.5	$6,296.0	-$271.5
TOTAL:								
Salaries & Expenses		$10,486.2	$12,381.6	$11,993.2	-$515.9	$11,477.3	$12,154.5	$677.2
Abatement Control and Compliance		$6,600.3	$12,813.8	$12,913.8	-$555.3	$12,358.5	$12,245.8	-$112.7

Water Quality

Water Quality Strategies Implementation

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
				(DOLLARS IN THOUSANDS)				
Water Quality Strategies Implementation	TOTAL	$17,086.5	$25,195.4	$24,907.0	-$1,071.2	$23,835.8	$24,400.3	$564.5
PERMANENT WORKYEARS								
Dredge and Fill		63.5	68.6	68.8		68.8	68.8	
Ocean Disposal Permits		38.9	42.4	44.3		44.3	52.3	8.0
Environmental Emergency Response & Prevention		41.3	60.8	60.9		60.9	61.2	0.3
Standards & Regulations		86.5	89.3	87.1		87.1	84.7	-2.4
TOTAL PERMANENT WORKYEARS		230.2	261.1	261.1		261.1	267.0	5.9
TOTAL WORKYEARS								
Dredge and Fill		66.2	75.3	75.3		75.3	75.3	
Ocean Disposal Permits		41.0	45.6	47.0		47.0	55.4	8.4
Environmental Emergency Response & Prevention		46.4	68.1	68.0		68.0	68.0	
Standards & Regulations		94.5	95.5	95.5		95.5	91.6	-3.9
TOTAL WORKYEARS		248.1	284.5	285.8		285.8	290.3	4.5

WATER QUALITY

Water Quality Strategies Implementation

Budget Request

The Agency requests a total of $24,400,300 supported by 290.3 total workyears for 1987, an increase of $564,500 and an increase of 4.5 total workyears from 1986. Of this request, $12,154,500 will be for the Salaries and Expenses appropriation and $12,245,800 will be for the Abatement, Control and Compliance appropriation, an increase of $677,200 and a decrease of $112,700 respectively.

Program Description

The program areas under this subactivity include:

Dredge and Fill -- The focus of the Section 404 Program will be to ensure that the most significant problems in wetlands and other aquatic systems are identified and appropriately addressed through implementation of improved scientific and administrative methods for dealing with those problems. Headquarters will develop guidance and revise regulations and procedures to ensure sound, effective, and consistent methods to identify and address the most significant environmental problems supported by an active enforcement and compliance program. Regions will use their authorities to review and comment on public notices of permit applications and, when necessary to protect significant resource values, will elevate permits, restrict or prohibit discharges, and establish jurisdictional boundaries to ensure a strong, efficient, and consistent program. Regions will assist in the identification of critical wetlands requiring immediate protective action, will strengthen efforts to have an effective 404 compliance and enforcement program, and will continue their work in transferring the Section 404 Program to interested and qualified States.

Ocean Disposal Permits -- The ocean disposal program includes the regulation of ocean disposal by outfalls, dumping, incineration at sea, designation of disposal sites, development of ocean disposal policies, and participation in interagency programs that deal with the development and protection of ocean resources. The Agency's ocean disposal programs are authorized by the Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 and the Clean Water Act, as amended, and are consistent with the mandatory provisions of the current Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matter, known as the London Dumping Convention. This program supports both Headquarters and Regional staff.

To carry out ocean disposal permitting functions, the Administrator of EPA is authorized to regulate the disposal of all materials except dredged material, which is regulated by the Corps of Engineers. MPRSA prohibits the transportation and dumping in ocean water of chemical, biological, and radiological warfare agents and high level radioactive materials. EPA has statutory responsibility for designating all ocean dumping sites, including those for dredged material.

Environmental Emergency Response and Prevention -- This program will continue to maintain an around-the-clock capability to receive notice of and respond to major incidents of accidental releases of oil and other petroleum products. (Spills of hazardous substances are covered under Superfund.) Removal actions will be directed by Regional personnel at serious incidents where the responsible party is unidentifiable, refuses to clean up, or is incapable of providing adequate response and where State or local authorities lack appropriate expertise or resources.

The cleanup monitoring program will continue to provide incentive for adequate removal by responsible parties, as well as serve as a mechanism for drawing State and local agencies into directing removals themselves. The Agency's focus in 1986 will be on encouraging State and local governments to assume a greater share of the responsibility for responsing to oil spills. Federal resources, therefore, will be concentrated on major actions where State, local, or private response is not feasible.

Standards and Regulations -- This program implements water quality-based controls by setting water quality standards pursuant to Section 303, 304(a), and 307(a) of the Clean Water Act (CWA). EPA and the States use the water quality criteria adopted in the standards as the basis for water quality-based controls. EPA publishes guidance on water quality criteria applicable to freshwater, marine, and estuarine environments and sediments. Under Section 405, the Agency develops and publishes regulations providing guidelines for the disposal and utilization of sludge. This program also includes Clean Lakes grants management. Both Headquarters and Regional programs are supported by this program element.

DREDGE AND FILL

1987 Program Request

The Agency requests a total of $4,597,800 supported by 75.3 total workyears for this program, of which $2,944,500 will be for the Salaries and Expenses appropriation and $1,653,300 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $139,700 and $71,100, respectively, no change in total workyears. The increases reflect adjustments to the 1986 base as part of government-wide deficit reductions.

The major focus of the Headquarters program will be to ensure that the most significant national problems in wetland and other aquatic systems are identified and protection increased appropriately through development of consistent and effective national policies and related guidance, implementation of revised regulations and procedures for State program assumption, increased cooperative effort with other Federal Agencies and through implementation of improved scientific and technical methods of addressing significant problems. This will increase program predictability and efficiency for the regulated public. Regions will continue to use their authorities to protect significant resource values. Regions will also increase their enforcement and compliance efforts and continue to encourage the transfer of the Section 404 Program to interested and qualified States under the revised regulations.

1986 Program

In 1986, the Agency is allocating a total of $4,387,000 supported by 75.3 total workyears for this program, of which $2,804,800 is from the Salaries and Expenses appropriation and $1,582,200 is for the Abatement, Control and Compliance appropriation.

Headquarters will develop a system for identifying the most significant problems involving wetlands and other aquatic areas, improve scientific and technical methods of addressing them, and finalize revisions to the 404 State Program regulations. Regions will initiate action to address the most significant environmental problems (for example, the loss of bottomland hardwood wetlands). Regions will also strengthen efforts to transfer the 404 Program to the States and to ensure general permits are environmentally sound.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,104,200 supported by 66.2 total workyears for this program, of which $2,632,300 was from the Salaries and Expenses appropriation and $471,900 from the Abatement, Control and Compliance appropriation.

Headquarters initiated development of a 1986 EPA Program Management plan, and proposed revised 404 State Program regulations. Regions reviewed over 6,000 Section 404 permits, ensured general permits were soundly developed, continued to work with States on 404 program assumption, and exercised EPA's authorities under the Clean Water Act to prevent unacceptable discharges of dredged and fill material.

OCEAN DISPOSAL PERMITS

1987 Program Request

The Agency requests a total of $9,071,100 supported by 55.4 total workyears for this program, of which $2,491,900 will be for the Salaries and Expenses appropriation and $6,579,200 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $416,800 and $74,200, respectively, and an increase of 8.4 in total workyears. The increases reflect expanded emphasis on deep water site management and ocean incineration permitting.

The Agency will be completing development of a comprehensive revision to the ocean dumping regulations and development of program guidance and technical protocols as required. The comprehensive revision will be responsive to two court cases, amendments to legislation, and the knowledge and experience gained through program management.

Further evaluations will be conducted in fully assessing the long term impacts of incineration-at-sea. With the promulgation of the incineration-at-sea regulation in 1986, there will be increased site designation activity, permitting activity and a corresponding increase for comprehensive monitoring activity.

The Agency will be continuing to review and issue permits for municipal and industrial ocean disposal. This activity includes evaluating and characterizing waste samples on a case-by-case basis. The Agency will also continue to review dredged material disposal permits issued by the Corps of Engineers, and will continue the accelerated preparation of environmental assessments to support site designations for those dredged material disposal sites not covered by the National Wildlife Federation (NWF) Consent Decree.

The ongoing site management responsibilities will increase as more interim dredged material disposal sites are designated as final sites and there is increasing usage of deep water sites for municipal and industrial disposal operations and incineration-at-sea burns. There will be a further emphasis on data management as the number of continuing and comprehensive site monitoring programs increases through the operation of the dredged material sites with final designations and of the deep water disposal and burn sites.

The Agency plans to resolve issues on regulatory, operational and administrative issues and institute user fees for this program in 1987. Fees received from the Ocean Disposal Permits program will not affect the Budget Authority requested for the program in 1987.

1986 Program

In 1986, the Agency is allocating a total of $8,580,100 supported by 47.0 total workyears for this program, of which $2,075,100 is from the Salaries and Expenses appropriation and $6,505,000 is from the Abatement, Control, and Compliance appropriation.

The program is continuing to develop the ocean dumping regulations. These regulations respond to a 1981 court decision, which ruled that the Agency must consider the comparative environmental effects of land versus ocean disposal in considering an ocean disposal permit application. That court decision also requires the Agency to provide for balancing the environmental effects of ocean disposal methods, while meeting specific environmental criteria established by the Statute.

In the area of site designation and monitoring, the program has scheduled 26 surveys of interim and existing ocean disposal sites for site designation purposes and to determine the environmental impacts of disposal. Two deep water sites within the New York 106-mile site is being monitored in accordance with a comprehensive monitoring plan.

Of particular concern in 1986 is the development and implementation of the incineration-at-sea regulation, paralleled by the implementation of the research strategy for this program. Additional ports of loading and potential incineration sites are being surveyed for designation in the Atlantic and Pacific Oceans. Comprehensive incineration site monitoring programs are being implemented to assure adequate baseline information for designation and/or to assess continuing protection of the marine environment through adequate site management. A permit has been proposed for a research burn. The Agency is establishing a comprehensive monitoring assessment and impact analysis program to review the data from the research burn to support authorization of subsequent burns. A major element of the impact analysis program is the development of a predictive model to be used in assessing environmental impacts from incineration operations.

1985 Accomplishments

In 1985, the Agency obligated a total of $4,191,800 supported by 41.0 total workyears for this program, of which $2,061,300 was from the Salaries and Expenses appropriation and $2,130,500 was from the Abatement, Control and Compliance appropriation.

The majority of the extramural resources were for site surveys, development of environmental assessments, and site designation, and the review, processing, and issuance of permits for ocean disposal. This includes evaluating and characterizing waste samples provided by facilities applying for permits. The waste characteristics are examined for suitability for ocean disposal at existing sites on a case-by-case basis.

The Agency conducted monitoring surveys of existing and interim designated ocean disposal sites. Samples were collected and analyzed to determine and monitor the environmental impacts of waste disposal at the designated ocean sites. Environmental Impact Statements were issued on ocean disposal sites as required under the National Wildlife Federation Consent Decree. Additional site designation work was begun on interim designated material disposal sites not covered under the Consent Decree.

Substantial work was undertaken for the incineration-at-sea program. Regulations were proposed in February 1985. EPA held 5 public hearings and conducted numerous informational briefings around the country. Over 500 separate comments were received during the comment period which closed in June 1985. In addition, EPA produced a research strategy to support the program and initiated efforts to implement the research strategy.

Work was initiated on revision of the ocean dumping regulations.

ENVIRONMENTAL EMERGENCY RESPONSE AND PREVENTION

1987 Program Request

The Agency requests a total of $4,435,400 supported by 68.0 total workyears years for this program, of which $2,587,400 will be for the Salaries and Expenses appropriation and $1,848,000 will be for the Abatement, Control, and Compliance appropriation. This reflects an increase of $150,400 and a decrease of $16,200, respectively, and no change in total workyears. The increase is due to higher operating costs.

The Agency has a 24-hour-a-day capability to respond to notifications of accidental spills or threats of releases. Federal removal is directed at major incidents where the responsible party is unidentifiable, refuses to clean up, or is incapable of providing timely and adequate removal and where the States and local authorities lack the necessary expertise, equipment, or funding.

Spill notifications will be processed to determine what, if any, response is required. The Federal government will direct response operations at 120 major spills and will monitor on-scene at 400 removals conducted by responsible parties or State and local authorities to ensure adequate response.

Federal regulations require the implementation of a Spill Prevention, Control, and Countermeasure (SPCC) plan at oil storage facilities and transfer points that could reasonably be expected to spill a significant amount of oil into the waters of the United States. Regional staff, with assistance from contractor personnel, will conduct compliance inspections at selected facilities included in the SPCC program, in an effort to reduce the frequency and volume of releases that occur. An estimated 1,550 SPCC inspections will be conducted.

The Agency also maintains an Environmental Response Team (ERT) to provide Regional and State personnel with response training and on-site technical and operational assistance at complex emergency incidents. The ERT is staffed by personnel with a high degree of expertise in the areas of spill control and removal, spill sampling and analysis techniques, and damage assessments.

Regional response capability is augmented through the Technical Assistance Team (TAT) contract. This contract provides contractor workyears to assist Regional staff and the ERT in responding to Clean Water Act section 311 spills and environmental emergencies.

1986 Program

In 1986 the Agency is allocating a total of $4,301,200 supported by 68.0 total workyears to this program, of which $2,437,000 is from the Salaries and Expenses appropriation and $1,864,200 is from the Abatement, Control, and Compliance appropriation.

Headquarters will ensure overall management of the program and the Regions will be responsible for managing response actions. The oil component of the ERT will provide special engineering and technical advice at any unusually large or complex spills. Regional personnel will be available on a 24-hour basis to respond to the estimated 9,000 notifications received by the National Response Center of accidental releases of oil and other petroleum products. The Agency will provide on-scene monitoring at 400 removals undertaken by responsible parties or State and local authorities and will direct removals at 120 major oil incidents. An estimated 1,550 SPCC inspections will be conducted.

1985 Accomplishments

In 1985 the Agency obligated $3,340,900 supported by 46.4 total workyears for this program, of which $1,707,200 was from the Salaries and Expenses appropriation and $1,633,700 was from the Abatement, Control, and Compliance appropriation. Regional offices received and screened over 9,000 notifications of oil spill releases. Of these, the Agency directed removals at 58 major oil spills and responded on-scene at 370 non-Federally funded incidents. In addi-

STANDARDS AND REGULATIONS

1987 Program Request

The Agency requests a total of $6,296,000 supported by 91.6 total workyears for this program, of which $4,130,700 will be for the Salaries and Expenses appropriation and $2,165,300 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $29,700 and $241,800, respectively, and a decrease of 3.9 in total workyears. Resource decreases reflect the completion of sediment studies and the issuance of sediment criteria in 1986.

State water quality standards serve as the regulatory basis for treatment controls that go beyond technology-based treatment requirements. The Agency will continue to work with States to identify water quality limited stream segments where standards revisions may be warranted. The revised water quality standards regulation specifies that States must identify specific water bodies where toxic pollutants are known or suspected to be causing use impairment. To ensure that water quality standards are based on adequate data and information, and that they meet the requirements of the Clean Water Act, the Regional Offices will continue assisting States in collecting data and determining where site-specific criteria development may be warranted.

The program will continue to work with States in integrating the development of site-specific criteria into the States' standards review and revision process. The program will provide guidance and assistance to the States to resolve intra- and interstate issues affecting toxic pollutant permit controls, and continue to develop guidance to help States establish and implement approaches for applying numerical or narrative toxic standards in permitting programs.

In 1987, the program will continue its primary emphasis on developing and issuing water quality criteria and water quality advisories for freshwater and marine aquatic life to help States determine appropriate protection levels for toxic and other pollutants. Water quality advisories provide screening levels for pollutants based on available data for both aquatic life and human health effects. State adoption of criteria for toxic pollutants is a requirement under the revised water quality standards regulation.

The Agency will promulgate technical criteria and management practices for the reuse or disposal of municipal sewage sludge in 1987, and the program will shift from regulation development to regulation implementation.

1986 Program

In 1986, the Agency is allocating a total of $6,567,500 and 95.5 total workyears for this program, of which $4,160,400 is from the Salaries and Expenses appropriation and $2,407,100 is from the Abatement, Control and Compliance appropriation.

The Agency continues its emphasis on the development and issuance of criteria and water quality advisories primarily for toxic and non-conventional pollutants in fresh and marine environments. In 1985, the Agency initiated work on developing scientific methods for screening pollutants in sediment, and in 1986, is planning to propose sediment criteria for four pollutants, two organic chemicals and two metals.

The program is working with the States to implement the revised water quality standards regulation with special emphasis on adopting toxic criteria and upgrading water body uses to fishable and swimmable standards. Greater priority is being given to examining the adequacy of any narrative criteria for toxics and identifying the method by which the State intends to regulate point source discharges of toxic pollutants. Regional Offices continue to review State-adopted additions or revisions to water quality standards. EPA is assisting the States in the use of site-specific criteria and use attainability protocols.

The Agency is developing regulations for the disposal and utilization of municipal sewage sludge under Section 405 of the CWA. The program will propose methodologies for developing numerical limits, management practices and technological controls of sludge, to develop environmental profiles for contaminants of concern, and to issue technical summary documents for each sludge disposal option. This effort will provide the technical basis for conducting intermedia analyses and for proposal of technical sewage sludge regulations in 1986.

The Agency will continue to provide management of the Clean Lakes projects and assist States and local agencies in overseeing lake restoration project funding.

1985 Accomplishments

In 1985, the Agency obligated $6,449,600 supported by 94.5 total workyears for this program, of which $4,085,400 was from the Salaries and Expenses appropriation and $2,364,200 was from the Abatement, Control and Compliance appropriation.

The program published final documents for nine freshwater criteria, ten marine criteria and a revised methodology, and proposed a new criteria for dissolved oxygen. Screening level procedures and a long term workplan were developed for sediment criteria, and the microbiological criteria was proposed. Planning and development of water quality advisories was initiated. Environmental profiles and an overall summary for forty-nine possible pollutants was published for the sewage sludge criteria/regulations. The variance policy of the revised water quality standards regulation was updated and guidance on anti-degradation was published. Technical workshops were conducted on implementation of the standards regulation, use attainability analyses, and development of site-specific criteria.

The Agency responded to hundreds of requests from all States for support in conducting use attainability analyses, setting site-specific criteria, and increasing the coverage of toxic pollutants in State standards. Water quality standards promulgation was proposed for Idaho and public hearings were conducted. The program continued management of the Clean Lakes program, which included reviewing and approving grant applications for existing Clean Lakes projects.

WATER QUALITY

Water Quality Monitoring & Analysis

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Coastal Environment Management								
Salaries & Expenses		$336.2	$311.3	$1,704.5	-$73.2	$1,631.3	$1,686.8	$55.5
Abatement Control and Compliance			$4,000.0	$7,675.0	-$330.0	$7,345.0	$6,195.7	-$1,149.3
	TOTAL	$336.2	$4,311.3	$9,379.5	-$403.2	$8,976.3	$7,882.5	-$1,093.8
Water Quality Monitoring & Analysis								
Salaries & Expenses		$8,170.4	$7,778.8	$7,848.7	-$337.4	$7,511.3	$7,436.2	-$75.1
Abatement Control and Compliance		$4,661.9	$3,815.6	$3,815.6	-$164.0	$3,651.6	$2,891.9	-$759.7
	TOTAL	$12,832.3	$11,594.4	$11,664.3	-$501.4	$11,162.9	$10,328.1	-$834.8
TOTAL:								
Salaries & Expenses		$8,506.6	$8,090.1	$9,553.2	-$410.6	$9,142.6	$9,123.0	-$19.6
Abatement Control and Compliance		$4,661.9	$7,815.6	$11,490.6	-$494.0	$10,996.6	$9,087.6	-$1,909.0
Water Quality Monitoring & Analysis	TOTAL	$13,168.5	$15,905.7	$21,043.8	-$904.6	$20,139.2	$18,210.6	-$1,928.6

WATER QUALITY

Water Quality Monitoring & Analysis

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Coastal Environment Management	5.9	6.0	41.1		41.1	41.1	
Water Quality Monitoring & Analysis	166.4	153.3	154.0		154.0	150.3	-3.7
TOTAL PERMANENT WORKYEARS	172.3	159.3	195.1		195.1	191.4	-3.7
TOTAL WORKYEARS							
Coastal Environment Management	6.4	6.0	44.8		44.8	44.8	
Water Quality Monitoring & Analysis	187.1	170.8	170.8		170.8	163.5	-7.3
TOTAL WORKYEARS	193.5	176.8	215.6		215.6	208.3	-7.3

Water Quality Monitoring and Analysis

Budget Request

The Agency requests a total of $18,210,600 supported by 208.3 workyears for 1987, a decrease of $1,928,600 and 7.3 total workyears from 1986. Of the request, $9,123,000 will be for the Salaries and Expenses appropriation and $9,087,600 will be for the Abatement, Control and Compliance appropriation, a decrease of $19,600 and $1,909,000 respectively.

Program Description

The program areas under this subactivity include:

Coastal Environment Management -- This program element integrates all Clean Water Act activities related to coastal waters including estuarine management (previously budgeted under Comprehensive Estuarine Management) and 301(h) marine discharge waivers (previously budgeted under Permit Issuance). This program provides assistance to support those State and local management activities required to protect or to restore the estuarine zone and continental shelf ecosystem, including water quality, balanced indigenous populations of marine biota, and other beneficial uses, from the adverse impacts of toxic, nutrient and other pollutants. This includes 1) supporting State and local studies for selected estuarine initiatives, 2) making determinations on (and monitoring) ocean discharge waiver requests, and 3) evaluating all ocean discharges against 403(c) criteria. This program supports both Headquarters and Regional staffs.

Water Quality Monitoring and Analysis -- This program supports biological, chemical, and physical evaluations of water quality to assess water quality status and trends, identify water quality problems and their causes, and determine cost-effective levels of control required to meet local water quality objectives. The program emphasizes effective technical guidance and assistance to the States, which are primarily responsible for collecting, analyzing, and interpreting monitoring data. These activities and requirements are authorized by Sections 104, 106, 303, and 305 of the Clean Water Act. This program supports both Headquarters and Regional staffs.

COASTAL ENVIRONMENT MANAGEMENT

1987 Program Request

The Agency requests a total of $7,882,500 supported by 44.8 total workyears for this program, of which $1,686,800 will be for the Salaries and Expenses appropriation and $6,195,700 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $55,500 and a decrease of $1,149,300, respectively and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of the government-wide deficit reductions. The decrease in Abatement, Control and Compliance reflects the completion of two estuarine studies.

In 1987 the Agency will continue to manage technical support contracts for the review of 301(h) marine discharge waiver applications and monitoring programs. Most decisions will be completed by the end of the year and waiver recipients will begin implementing water quality monitoring programs. The focus of the program will have shifted to the managing and analyzing of monitoring data from waiver recipients.

The Agency will begin providing technical support for the preparation of 403(c) Ocean Discharge Criteria Evaluations for general permits for oil and gas operations on the outer continental shelf.

Technical support will continue for the national estuarine programs. This comprehensive estuarine approach includes quantifying pollutant loads, assessing impacts on estuarine water quality and resources, and providing recommendations on priority trade-offs of load reduction between sources so that EPA and States can take the appropriate steps to restore or maintain and, where possible, enhance environmental quality. The approach uses participatory management and joint decision making among Federal, State, and local authorities, as well as the public, to define the nature and extent of environmental problems, analyze appropriate data, relate ambient water quality conditions to land based pollutant loads, gather monitoring data and develop monitoring plans, and recommend alternative management actions to abate environmental problems.

It is anticipated that two of the national estuarine studies started in 1985 will be nearing completion as public discussion of their draft master plans begins. Two new estuarine initiatives will be selected on the basis of national environmental priorities.

1986 Program

The Agency is allocating a total of $8,976,300 supported by 44.8 total workyears in this program, of which $1,631,300 is from the Salaries and Expenses appropriation and $7,345,000 is from the Abatement, Control and Compliance appropriation.

During 1986, the estuarine management program is accelerating the integration of work products from 1985, including problem identification and assessment, pollutant source quantification, assessment of impacts on environmental quality, and specific action plans for priority problems identified. These are essential inputs for the monitoring programs and the development of comprehensive environmental master plans for Long Island Sound, Narragansett Bay, Buzzards Bay, and Puget Sound. The plans will balance pollution control levels between point and nonpoint sources, and will form the basis for implementing control actions to achieve environmental results.

The Agency, in coordination with National Oceanic and Atmospheric Administration (NOAA), is assisting selected State and local agencies in the development and implementation of estuarine studies and programs through financial assistance, both matching grants and contracts, and generic guidance developed on the basis of the Agency's experience in the Chesapeake Bay and Great Lakes Programs. The Agency is also developing a technology transfer system to aid the selected estuary programs and other estuarine initiatives, as appropriate, in the interchange of technical methodologies and program management techniques.

During 1986, 301(h) decisions will be accelerated to assure that National Municipal Policy Waiver recipients are implementing their monitoring programs and submitting monitoring data to the Agency for analysis.

1985 Accomplishments

In 1985, the Agency obligated for the Comprehensive Estuarine Management activities in this program element a total of $336,200, supported by 6.4 workyears for this program, all of which was from the Salaries and Expenses appropriation. The 301(h) activities in this program element were included in the Permit Issuance program element in 1985.

The Agency, in coordination with NOAA, assisted State and local agencies dealing with these four water bodies during 1985 in the formulation of work programs to carry out studies to determine wasteload sources and characteristics, to locate and quantify nutrient and toxic problem areas, and to identify the management and data needs for the design of control and abatement programs. EPA provided financial assistance through matching grants and contracts to carry out the studies. The overall schedule for completion of each estuary will vary depending on the complexity of the estuary and extent of previously completed work.

On the basis of nutrient and toxics abatement experiences gained in the Chesapeake Bay Program and the Great Lakes Program, the Agency developed a national estuarine policy and generic estuarine program guidance document for use by State and local officials in program design and implementation.

Under the Comprehensive Estuarine Management sub-activity in the Research and Development appropriation, $3,962,500 was obligated for water quality research, sampling, monitoring, and assessment in this area. This was the initial funding provided to assist State and local agencies in developing programs for Long Island Sound, Narragansett Bay, Buzzards Bay, and Puget Sound to protect the critical ecosystems of these estuarine zones from land-generated nutrient and toxic pollutants.

WATER QUALITY MONITORING AND ANALYSIS

1987 Program Request

The Agency requests a total of $10,328,100 supported by 163.5 total workyears for this program, of which $7,436,200 will be for the Salaries and Expenses appropriation and $2,891,900 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $75,100 and $759,700 respectively and a decrease of 7.3 total workyears. These decreases primarily reflect reduced emphasis on issuance of detailed technical guidance documents and the completion of the National Dioxin Study final report.

Many dischargers of toxic pollutants may need more stringent National Pollutant Discharge Elimination System (NPDES) permit limitations in order to meet State water quality standards. For this reason, a high priority of the program is to continue to assist States in developing water quality-based controls for toxic pollutants for NPDES permits. The program will continue to assist States and Regions in the use of biomonitoring techniques for assessing and controlling toxicity of effluents, and in the use of new interactive wasteload allocation (WLA) models for personal computers. The program will provide workshops on WLAs and will work with States on site-specific WLA projects. In addition, the Regions will continue technical reviews of State-submitted total maximum/daily loads (TMDLs) and WLAs.

The program will continue to improve the management and use of water quality information for purposes of selecting and analyzing problem waters. New methods such as biological survey techniques and computerized files will be developed and maintained for use by Regions and States in identifying and tracking waters. The program will also conduct additional pilot applications of data integration techniques with the States for their use in biennial Section 305(b) assessments and for WLAs.

The program will work actively with States to continue the shift of emphasis from routine monitoring of conventional pollutants to address aquatic toxicity and human health problems. The Regions will continue to assess water quality problems and conduct laboratory analyses at priority sites and work with States in identifying stream reaches that need water quality-based controls including WLAs.

The program will continue studies of bioaccumulative pollutants in fish tissue and contamination of sediments. In the 1984 Section 305(b) reports, several States reported detectable levels of toxic pollutants in fish tissue that exceeded Food and Drug Administration (FDA) action levels, and reported other actions such as fish consumption advisories and bans. The Agency's bioaccumulation study is designed to characterize the nature and extent of fish tissue contamination. Sampling and statistical analysis will be completed by the end of 1987. Also, the program will initiate field sampling activities as part of a comprehensive national assessment of accumulation of toxic pollutants in sediments in order for EPA to deal with these difficult, unregulated contamination problems. The sediment study will evaluate the nature of the problem and its causes, and will investigate the technical, administrative, and legal aspects of alternatives for mitigating sediment contamination problems. The results of these studies will assist in focusing future regulatory control actions to reduce exposure to toxic pollutants. The program will continue its support of quality assurance (QA) for all monitoring activities and provide positions for the Environmental Services Division Directors.

1986 Program

The Agency is allocating a total of $11,162,900 supported by 170.8 total workyears for this program, of which $7,511,300 is from the Salaries and Expenses appropriation and $3,651,600 is from the Abatement, Control and Compliance appropriation.

The program is continuing to work with the States to implement the monitoring strategy which EPA updated in 1985 to emphasize improved information management to help target toxic pollutant monitoring. Regions will work with States to assure that State programs are directed to the important environmental problems and that water quality-based permits are developed where appropriate.

The program is providing technical support to States for developing water quality-based limitations and improving methods used to support State permit writers. The program will provide technical assistance in analyzing the State backlog of toxic pollutant samples. We will provide assistance to State permit writers in the use of biomonitoring techniques and in directly assessing the chronic and acute toxicity of discharges. Review of State WLAs and TMDLs will continue with special emphasis on areas where control decisions are most needed.

Headquarters is issuing further technical guidance and conduct additional workshops on WLAs and biomonitoring approaches. These methodologies will be extended to key types of estuarine and marine waters. In addition, field tests of the technical guidance will be performed in cooperation with other Headquarters offices, Regions and States.

Analysis and evaluation of the results of the National Dioxin Study was completed in December 1985 and a final report is being prepared for Congress. The program is conducting follow-up assessments in some locations to identify the specific sources of dioxin problems and will initiate appropriate clean-up, health advisories or other actions. Also, sampling and analysis will begin in 1986 on a study of other dioxin isomers and on other persistent and bioaccumulative pollutants in fish tissue. The study will utilize samples collected during the dioxin study and new samples collected at areas of suspected contamination. In a separate study the program will compile an inventory of sediment contamination problems throughout the United States. The information will be used in 1987 to target field sampling activities, as part of a comprehensive national assessment.

The program will continue to implement quality assurance (QA) efforts. This includes overseeing State QA implementation required in EPA grants, participating in interlaboratory tests and audits, and reviewing QA procedures. The program will also continue to operate and enhance the water quality information systems. The Regional offices will work with the States in preparing the 1986 Section 305(b) report.

1985 Accomplishments

In 1985, the Agency obligated $12,832,300 supported by 187.1 total workyears for this program of which $8,170,400 was from the Salaries and Expenses appropriation and $4,661,900 was from the Abatement, Control and Compliance appropriation.

The program continued to promote the use of biomonitoring and to assist in development of TMDLs and WLAs. In conjunction with the National Pollutant Discharge Elimination System (NPDES) program, we issued a final technical support document for water quality-based control of toxic pollutants, using biomonitoring to assess the toxicity of effluents. The two programs jointly held seven technical workshops for Regions and States to explain and promote the use of these methods. The program developed a pilot test of these technical approaches for controlling actual instream consequences of the discharge of toxicity in effluents.

The program completed sampling for the National Dioxin Study. This effort included sampling a representative number of hydrologic units to assess dioxin build-up in bed sediments and native fish. It also included intensive surveys at a sample of manufacturing and pesticide use sites. A final report is being prepared for issuance in FY 1986.

The program issued the 1984 Section 305(b) Water Quality Inventory Report to Congress and issued guidance to the States for preparing the 1986 Section 305(b) report. This guidance incorporated the standardized approach for assessing and reporting water quality which EPA developed jointly with the States during 1983-1984.

WATER QUALITY

Municipal Source Control

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Municipal Waste Treatment Facility Construction								
Salaries & Expenses		$21,834.9	$21,895.0	$21,800.2	-$937.5	$20,862.7	$20,173.8	-$688.9
Abatement Control and Compliance		$20,719.1	$19,979.1	$21,979.1	-$945.1	$21,034.0	$18,779.1	-$2,254.9
Abatement Control and Compliance		$13,000.0						
	TOTAL	$55,554.0	$41,874.1	$43,779.3	-$1,892.6	$41,896.7	$38,952.9	-$2,943.8
Waste Treatment Operations & Maintenance								
Salaries & Expenses		$1,413.6	$1,577.9	$1,549.6	-$66.6	$1,483.0	$1,353.9	-$129.1
	TOTAL	$1,413.6	$1,577.9	$1,549.6	-$66.6	$1,483.0	$1,353.9	-$129.1
TOTAL:								
Salaries & Expenses		$23,248.5	$23,472.9	$23,349.8	-$1,004.1	$22,345.7	$21,527.7	-$818.0
Abatement Control and Compliance		$20,719.1	$19,979.1	$21,979.1	-$945.1	$21,034.0	$18,779.1	-$2,254.9
Abatement Control and Compliance		$13,000.0						
Municipal Source Control	TOTAL	$56,967.6	$43,452.0	$45,328.9	-$1,949.2	$43,379.7	$40,306.8	-$3,072.9

WATER QUALITY

Municipal Source Control

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Municipal Waste Treatment Facility Construction	482.6	472.5	472.0		472.0	461.3	-10.7
Waste Treatment Operations & Maintenance	32.8	33.1	33.7		33.7	30.5	-3.2
TOTAL PERMANENT WORKYEARS	515.4	505.6	505.7		505.7	491.8	-13.9
TOTAL WORKYEARS							
Municipal Waste Treatment Facility Construction	539.6	523.5	523.2		523.2	480.4	-42.8
Waste Treatment Operations & Maintenance	32.8	34.3	34.5		34.5	30.5	-4.0
TOTAL WORKYEARS	572.4	557.8	557.7		557.7	510.9	-46.8

WATER QUALITY

Municipal Source Control

Budget Request

The Agency requests a total of $40,306,800 supported by 510.9 total workyears for 1987, a decrease of $3,072,900 and 46.8 total workyears from 1986. Of the request, $21,527,700 will be for the Salaries and Expenses appropriation and $18,779,100 will be for the Abatement, Control and Compliance appropriation, a decrease of $818,000 and $2,254,900, respectively.

Program Description

This subactivity provides resources at Headquarters and in the Regions for management of the Construction Grants program. For budgetary purposes, resources devoted to managing the Construction Grants Program are divided into the following components:

Municipal Waste Treatment Facility Construction -- This program includes most of the management activities associated with the Construction Grants program in Headquarters and Regional Offices. Abatement, Control and Compliance resources primarily support an interagency agreement with the Corps of Engineers. Through this agreement, the Corps provides a wide range of construction management and training activities to assure the technical and fiscal integrity of wastewater treatment project construction.

Waste Treatment Operations and Maintenance -- This program supports development of State programs to ensure that Publicly Owned Wastewater Treatment Works (POTWs) meet effluent requirements. It also provides support in implementing the Agency's National Municipal Policy.

MUNICIPAL WASTE TREATMENT FACILITY CONSTRUCTION

1987 Program Request

The Agency requests a total of $38,952,900 supported by 480.4 total workyears for this program, of which $20,173,800 will be for the Salaries and Expenses appropriation and $18,779,100 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $688,900 and $2,254,900, respectively, and a decrease of 42.8 total workyears. The decrease in Salaries and Expenses reflects reduced EPA staffing needs as a result of reduced numbers of new awards and active projects and reduced emphasis on State technical assistance. The decrease in Abatement, Control and Compliance reflects lower funding requirements for the Corps of Engineers Interagency Agreement due to overall workload reductions.

Working with States, the Agency will manage a phaseout of Construction Grants by providing needed regulations, policies, and guidance to develop and implement State and local programs. EPA will act primarily as overall program manager with the States and the Corps will perform most project management activities. EPA will continue to exercise remaining nondelegated project managementrelated responsibilities in the States and territories. Grants and permits coordination will continue to be provided to implement the National Municipal Policy. The $16,759,300 request for the Corps of Engineers IAG will purchase 365 workyears of effort to provide construction management assistance to EPA and the States. The Corps will emphasize training of States to accelerate delegation of construction management activities in addition to its traditional construction management activities at active construction projects.

The 1986 Needs Survey will be completed and issued. EPA will continue to work with States to target available funds to meet highest priority water quality needs. To assist implementation of appropriate wastewater treatment technologies, EPA will publish materials on latest technological findings, and guidance to States on sludge management programs and practices. The Municipal Lagoon Study required by the 1984 Amendments to the Resource Conservation and Recovery Act (RCRA) will be completed and its findings will be summarized in a Report to Congress.

The Agency will monitor and provide project-specific assistance to eliminate remaining project completion/closeout backlogs and resolve claims and grantee appeals issues. Work will continue with the Office of Inspector General on audits and bidrigging control.

1986 Program

In 1986, the Agency is allocating a total of $41,896,700 supported by 523.2 total workyears for this program, of which $20,862,700 is from the Salaries and Expenses appropriation and $21,034,000 is from the Abatement, Control and Compliance appropriation.

In 1986, EPA is focusing on revising program regulations, policies and guidance needed to implement any statutory changes. The Agency is continuing to monitor State program management and to perform non-delegated program management activities. The Corps of Engineers is continuing to assist EPA and the States to ensure project construction integrity. The Corps will expend $18,400,000 and provide 418 workyears of construction management support.

The Agency is promulgating amendments to construction grants management regulations and issuing guidance on conducting value engineering reviews for projects under $10,000,000. Special review of proposed advanced treatment projects with incremental costs over $3,000,000 is continuing in Headquarters and is being delegated on a trial basis in three Regional Offices. Funds allocated for operator training are being targeted to States to continue providing on-site compliance assistance to small communities.

1985 Accomplishments

In 1985, the Agency obligated a total of $55,554,000 supported by 539.6 total workyears for this program, of which $21,834,900 was from the Salaries and Expenses appropriation and $33,719,100 was from the Abatement, Control, and Compliance appropriation. A special appropriation of $13,000,000 in Abatement, Control and Compliance was used to support the operation of a solid waste disposal facility in Akron, Ohio.

Regional staff worked closely with the States to ensure orderly implementation of the 1981 statutory changes coming into effect in 1985. In 1985, 845 projects initiated operation and 977 were closed out. The $17,050,000 for the Corps Interagency Agreement purchased 431 workyears of support to EPA and States to ensure technical and fiscal integrity of construction projects. Unliquidated obligations were reduced from $9,900,000,000 to $9,100,000,000.

The 1984 Needs Survey was published in 1985 presenting for the first time water quality and use improvements for each of 314 sub-basins. The Agency developed proposed sludge management regulations and promulgated revised secondary treatment regulations, including implementing guidance for State and local officials. Headquarters evaluated Regional review procedures concerning proposed high cost Advanced Treatment projects and submitted a Report to Congress. The Agency also awarded grants for the remaining 16 Marine Combined Sewer projects meeting national criteria. In 1985, the POTW Funding Task Force submitted its findings on funding strategies to promote long-term State and local self-sufficiency in financing wastewater treatment and long-term municipal compliance.

Grants totaling $2,300,000 for operator training were awarded to States to continue to provide onsite compliance assistance to operators of small facilities and to a national association to assist development of more effective, self-sufficient State operator training and Operation and Maintenance programs.

WASTE TREATMENT OPERATIONS AND MAINTENANCE

1987 Program Request

The Agency requests a total of $1,353,900 supported by 30.5 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $129,100 and 4.0 total workyears. The decrease reflects the ongoing progress of this program in developing effective State operations and maintenance and operator training programs.

To help ensure that Federally funded facilities continue to meet design performance and compliance requirements, Regional and State staff will continue to provide onsite compliance assistance at minor POTWs to implement the Operations Management Evaluation (OME) Program. In support of National Municipal Policy compliance, Regional staff will also assist in review of proposed compliance plans from communities not meeting their permit discharge limits.

EPA will also continue to implement the national Operation and Maintenance (O&M) Excellence Awards program. Staff will continue to review grantee first year project performance certifications. Regional staff will also continue to work with States to promote self-sufficiency in operator training and maintain essential oversight of State program implementation.

1986 Program

In 1986, the Agency is allocating a total of $1,483,000 supported by 34.5 total workyears, all of which is from the Salaries and Expenses appropriation.

Building on State program accomplishments, EPA Regional Office staff are implementing a new Operations Management Evaluation (OME) program at small publicly owned treatment facilities that are not in compliance, providing onsite compliance assistance in each State and managing State operator training grants. EPA will also implement a National O&M Excellence Awards program. Regional awards will be presented to sixty municipalities and national awards will be presented to six outstanding municipalities based on their O&M and compliance programs. Regional staff are continuing to assist EPA and State compliance programs to implement the National Municipal Policy. EPA is continuing to encourage implementation of State operator training action plans and compliance program integration.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,413,600 supported by 32.8 total workyears for this program, all of which was from the Salaries and Expenses appropriation.

The Agency issued guidance on implementation of the OME and O&M awards programs. The impact of the grantee first year performance certification requirements contained in the 1981 Amendments were felt significantly in 1985 as increasing numbers of performance certifications were received for review. EPA continued to assist States and grantees in developing improved operations and maintenance and operator training programs. Regional staff maintained oversight of operator training programs funded with prior year grants and awarded grants from the 1985 appropriation. Approximately 600 small facilities have been returned to compliance in the States and Puerto Rico. EPA submitted a Report to Congress on Training For Operators of Publicly Owned Wastewater Treatment Plants and, with States, is continuing to implement the multi-year plans in the report for ensuring self-sufficient, compliance-oriented State training programs.

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WATER QUALITY

Water Quality Enforcement

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
PROGRAM							
Water Quality Enforcement							
Salaries & Expenses	$14,690.2	$15,549.7	$16,629.2	-$714.8	$15,914.4	$15,999.5	$85.1
Abatement Control and Compliance	$1,280.6	$2,001.9	$6,057.0	-$260.4	$5,796.6	$2,057.0	-$3,739.6
TOTAL	$15,970.8	$17,551.6	$22,686.2	-$975.2	$21,711.0	$18,056.5	-$3,654.5
TOTAL:							
Salaries & Expenses	$14,690.2	$15,549.7	$16,629.2	-$714.8	$15,914.4	$15,999.5	$85.1
Abatement Control and Compliance	$1,280.6	$2,001.9	$6,057.0	-$260.4	$5,796.6	$2,057.0	-$3,739.6
Water Quality Enforcement TOTAL	$15,970.8	$17,551.6	$22,686.2	-$975.2	$21,711.0	$18,056.5	-$3,654.5
PERMANENT WORKYEARS							
Water Quality Enforcement	351.3	359.9	383.4		383.4	383.4	
TOTAL PERMANENT WORKYEARS	351.3	359.9	383.4		383.4	383.4	
TOTAL WORKYEARS							
Water Quality Enforcement	385.2	392.4	416.3		416.3	408.3	-8.0
TOTAL WORKYEARS	385.2	392.4	416.3		416.3	408.3	-8.0

WATER QUALITY

Water Quality Enforcement

Budget Request

The Agency requests a total of $18,056,500 supported by 408.3 total workyears for 1987, a decrease of $3,654,500 and 8.0 total workyears from 1986. Of the request, $15,999,500 will be for the Salaries and Expenses appropriation and $2,057,000 will be for the Abatement, Control and Compliance appropriation, an increase of $85,100 and a decrease of $3,739,600, respectively. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of governmentwide deficit reductions. The decrease in Abatement, Control, and Compliance primarily reflects discontinuation of a special grant program for improved enforcement.

Program Description

Water Quality Enforcement -- The National Pollutant Discharge Elimination System (NPDES) Enforcement Program (including pretreatment) assures the compliance of municipal and industrial permittees with NPDES requirements through a program of monitoring and inspections, administrative enforcement, and technical support of judicial enforcement actions. Major activities include 1) inspection of permittees ("permittee" includes industrial users of publicly-owned treatment works), 2) review of permittee monitoring data, 3) maintenance of a national data system, 4) identification and evaluation for appropriate follow-up of permittees in noncompliance, and 5) initiation of informal and formal enforcement actions to ensure compliance. Where informal negotiations and administrative enforcement actions do not result in compliance, cases are referred for judicial action and appropriate technical support is provided.

In addition to the NPDES portion of the Water Quality Enforcement Program, administrative and technical support is provided for the issuance of administrative enforcement actions against violations of the Spill Prevention Control and Countermeasure Plan requirements. Referrals are made to the U.S. Coast Guard for civil penalty assessment for oil and hazardous substance spill violations (Section 311(b)(6)(A)) in waters where EPA has jurisdiction, and inspection support is provided for enforcement against illegal dredge and fill activities (Section 404).

WATER QUALITY ENFORCEMENT

1987 Program Request

The Agency requests a total of $18,056,500 supported by 408.3 total workyears for this program, of which $15,999,500 will be for the Salaries and Expenses appropriation and $2,057,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $85,100 and a decrease of $3,739,600, respectively, and a decrease of 8.0 total workyears. The decrease in workyears reflects the shift from data entry to data updating and system maintenance for the Permit Compliance System (PCS). The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of governmentwide deficit reductions. The decrease in Abatement, Control and Compliance reflects completion of special grants to States for improved enforcement.

In 1987, EPA will focus on control of toxic discharges to surface waters by giving priority to implementation of the National Municipal Policy (NMP), overview and implementation of the pretreatment program, and compliance assessment and enforcement of Best Available Technology (BAT) and water quality based permits.

By the end of 1986, all major municipalities in nondelegated States needing construction to meet the July 1, 1988 statutory compliance deadline should be on enforceable schedules. Therefore, under the National Municipal Policy in 1987, EPA will focus on assuring that permittees placed on enforceable schedules comply with those schedules. EPA will address all of the major permittees that fail to comply with established schedules in nondelegated States through administrative orders and referrals to the Department of Justice. All major municipalities in nondelegated States that have completed construction and have operations and maintenance problems which result in noncompliance will also be addressed. A second objective related to implementation of the NMP is establishing schedules for the approximately 1,100 minor permittees in nondelegated States needing construction to meet the deadline. About 20% of this universe will be placed on enforceable schedules in 1987.

By the end of 1986, all publicly owned treatment works (POTWs) needing pretreatment programs should have approved programs in place. The Water Quality Enforcement Program will turn to: 1) oversight of delegated State programs; 2) assuring that local control authorities comply with the provisions of their approved programs; and 3) assuring the compliance of industrial users, especially where there is no local control authority or approved State. EPA will assess the compliance of local control authorities through the conduct of pretreatment inspections and the review of annual reports submitted by these authorities. Pretreatment inspections will be conducted and annual reports will be reviewed in most of the approved programs in nondelegated States. In nondelegated States, EPA will address most of the anticipated noncompliance by local control authorities which fail to implement the approved program. Parallel enforcement actions will be taken against industrial users (IUs) in some of these noncomplying local control authorities.

Where there is no local control authority or approved State, EPA is responsible for assuring that IUs comply with categorical standards. The Water Quality Enforcement Program will continue to identify these industrial users and to inspect where the most serious compliance problems are suspected. Formal enforcement actions will be brought against industrial users when noncompliance is identified.

In 1987, the upgrading and expansion of the Permit Compliance System (PCS) will continue. PCS will be used for such activities as evaluating the consistency of permit conditions and enforcement actions nationwide. Using PCS, EPA will initiate the automated generation of accountability system reports.

Regions will maintain an inspection program for municipal and industrial permittees to verify compliance with their NPDES permit requirements. A total of 2,243 inspections will be conducted. Regions will also continue to emphasize a "timely and appropriate" enforcement response in all cases of significant noncompliance by issuing 50 Notices of Violation and 877 Administrative Orders. Technical support will be provided for approximately 80 NPDES cases initiated in previous years. New enforcement efforts against industrial sources will focus on those industries required to install Best Available Technology. Non-NPDES administrative enforcement activities will include Section 404 inspections, support for oil and hazardous materials spill penalty assessment, and spill prevention control and countermeasure (SPCC) inspections and enforcement support.

1986 Program

In 1986, the Agency is allocating a total of $21,711,000 supported by 416.3 total workyears for this program, of which $15,914,400 is from the Salaries and Expenses appropriation and $5,796,600 is from the Abatement, Control and Compliance appropriation.

The Water Quality Enforcement Program is continuing to emphasize: maintenance of high levels of compliance by all permittees, with special attention on municipal permittees; an effective compliance monitoring and inspection program to verify levels of compliance; initiation and maintenance of a pretreatment compliance monitoring and enforcement program; and the expansion of the Permit Compliance System to provide for report preparation and tracking.

Implementation of the National Municipal Policy (NMP) remains the program's highest priority. This policy requires that all municipalities that are in noncompliance because of needed construction or because of poor operation and maintenance of sewage treatment plants be put on enforceable schedules that will assure compliance, where possible, by the July 1, 1988 statutory compliance deadline. In 1986, the Agency is establishing enforceable schedules for all municipalities in nondelegated States which need construction to comply through the issuance of an Administrative Order or the initiation of a referral for civil judicial action, and will enforce failure to comply with these schedules. All of the major municipalities in nondelegated States needing corrective action because of operation and maintenance problems which are identified in 1985 and 1986 are also being addressed. In those cases where NPDES States do not establish enforceable schedules for municipalities needing them, EPA is initiating action to establish or enforce these schedules.

The central focus of the pretreatment program has been the effort to establish approved programs at the 1,450 POTWs required to have them. In 1985, a National Enforcement Initiative for POTW pretreatment program submissions resulted in the filing of eight cases with the Department of Justice. The Agency is continuing to take judicial action against POTWs with unapproved programs and is also initiating judicial action against a number of industries which have failed to install necessary treatment to meet categorical standards. Implementation of a pretreatment compliance monitoring program, which includes the conduct of a small number of inspections and the review of annual reports, is in the initial stages.

In conjunction with Headquarters, the Regions have improved and expanded their compliance enforcement data management capabilities through the use of an expanded and enhanced Permit Compliance System (PCS). By the end of 1986 all EPA Regions will convert to the Data Base Management System (DBMS). Conversion to a DBMS system allows preparation of Quarterly Noncompliance Reports (QNCRs) through PCS, as well as reporting for accountability systems such as the Strategic Planning and Management System.

Regions are continuing to emphasize a "timely and appropriate" enforcement response in all cases of significant noncompliance. Industrial enforcement also continues to address largely routine violations, but special attention is focused on industrial facilities that are required to install Best Available Technology (BAT). More resource intensive inspections of these facilities are necessary, and some referral actions are anticipated. Non-NPDES administrative enforcement activities include Section 404 inspections, support for oil and hazardous materials spill penalty assessment, and spill prevention control and countermeasure (SPCC) insections and enforcement support.

1985 Accomplishments

In 1985 the Agency obligated a total of $15,970,800, supported by 385.2 total workyears, of which $14,690,200 was from the Salaries and Expenses appropriation and $1,280,600 was from the Abatement, Control and Compliance appropriation.

During 1985, implementation of the National Municipal Policy was the program's highest priority. Approximately, 40% of major municipalities needing construction to comply with the 1988 compliance deadline were placed on enforceable construction schedules. Enforceable construction schedules were also established for 20% of the minor municipal facilities needing schedules. Pretreatment activity focused on enforcement of the requirement that designated municipalities develop approvable local pretreatment programs and that industrial users comply with categorical pretreatment standards. The Agency reviewed and referred formal enforcement actions against 24 municipalities who failed to develop approvable pretreatment programs and 26 industrial users who failed to comply with categorical standards.

Contract resources were used to support and maintain a national data system (Permit Compliance System) which tracks the performance of all major permittees, to provide technical support for judicial enforcement actions, and to conduct inspections of municipal and industrial permittees. Contract funds were also used to train Regional and State personnel in monitoring and inspection techniques.

In 1985, 8% of major municipal permittees on final effluent limits were in significant noncompliance. 5% of industrial and other nonmunicipal permittees were in significant noncompliance. Both of these rates decreased from 1984 and reflect the emphasis given to timely and appropriate enforcement action against facilities in significant noncompliance.

Regional Offices conducted 2,080 compliance inspections, issued 24 Notices of Violations and 1,028 Administrative Orders. In States without approved NPDES programs EPA reviewed major dischargers' self-monitoring reports. Technical support was provided for the development of 118 civil cases which were referred to Headquarters for review.

Enforcement of Section 311 oil and hazardous substance spill requirements included 144 referrals to the U.S Coast Guard for assessment of civil penalties and 161 administrative actions for violations of Spill Prevention and Control Countermeasure plan requirements. Enforcement of Section 404 provisions focused on identifying illegal discharges of dredge and fill material. Thirteen administrative actions were taken.

WATER QUALITY

Water Quality Permit Issuance

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Permit Issuance							
Salaries & Expenses	$12,105.4	$12,865.5	$12,138.3	-$522.0	$11,616.3	$11,533.4	-$82.9
Abatement Control and Compliance	$3,790.3	$6,069.2	$4,329.1	-$186.2	$4,142.9	$3,778.7	-$364.2
TOTAL	$15,895.7	$18,934.7	$16,467.4	-$708.2	$15,759.2	$15,312.1	-$447.1
TOTAL:							
Salaries & Expenses	$12,105.4	$12,865.5	$12,138.3	-$522.0	$11,616.3	$11,533.4	-$82.9
Abatement Control and Compliance	$3,790.3	$6,069.2	$4,329.1	-$186.2	$4,142.9	$3,778.7	-$364.2
Water Quality Permit Issuance TOTAL	$15,895.7	$18,934.7	$16,467.4	-$708.2	$15,759.2	$15,312.1	-$447.1
PERMANENT WORKYEARS							
Permit Issuance	287.0	299.9	279.7		279.7	279.7	
TOTAL PERMANENT WORKYEARS	287.0	299.9	279.7		279.7	279.7	
TOTAL WORKYEARS							
Permit Issuance	315.0	334.0	307.7		307.7	295.7	-12.0
TOTAL WORKYEARS	315.0	334.0	307.7		307.7	295.7	-12.0

WATER QUALITY

Water Quality Permit Issuance

Budget Request

The Agency requests a total of $15,312,100 supported by 295.7 total workyears for 1987, a decrease of $447,100 and a decrease of 12.0 total workyears. Of the total request, $11,533,400 will be for the Salaries and Expenses appropriation and $3,778,700 will be for the Abatement, Control and Compliance appropriation, a decrease of $82,900 and $364,200, respectively.

Program Description

Permit Issuance -- The Clean Water Act authorizes a National Pollutant Discharge Elimination System (NPDES) permit program to reduce or eliminate point source pollution. The discharge of pollutants into waters of the United States by point sources is prohibited unless in compliance with an NPDES permit. At present, 36 States and one Territory have approved NPDES programs. EPA issues NPDES permits in the remaining jurisdictions.

Currently, the NPDES program is focusing on control of toxic pollutants through technology-based and water quality-based limits in NPDES permits, implementation of the pretreatment program for indirect discharges to publicly owned treatment works (POTWs) and approval and oversight of local and State pretreatment programs (22 States are approved to implement pretreatment programs).

The NPDES program also allows permittees and interested parties to request evidentiary hearings on permits and variances from certain effluent limitations.

PERMIT ISSUANCE

1987 Program Request

The Agency requests a total of $15,312,100 supported by 295.7 total workyears for this program, of which $11,533,400 will be for the Salaries and Expenses appropriation and $3,778,700 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $82,900 and $364,200, respectively, and a decrease of 12.0 total workyears. This decrease is due primarily to the substantial completion of the POTW pretreatment program approval effort.

During 1987, efforts will continue on issuing permits expiring in 1987 and modifying permits, with priority given to toxic pollutant controls based on water quality considerations. Municipal permits will be modified to incorporate final section 301(h) waiver decisions, pretreatment program implementation requirements, and toxic limits. During 1987, EPA will issue 244 major industrial permits and 172 major municipal permits. Continued emphasis will be placed on issuing permits to environmentally significant minor and unpermitted dischargers, especially those with toxic discharges or otherwise adversely affecting water quality. Continued emphasis will be given to issuing new source permits and general permits, particularly outer continental shelf general permits.

In 1987, EPA will continue to review and evaluate requests for fundamentally different factor, water quality, economic and thermal discharge variances, and request for extensions of Best Available Technology (BAT) compliance deadlines where innovative pollution control technologies are to be demonstrated.

Efforts will continue on assisting in the development of new State NPDES programs and necessary modifications to approved NPDES States. EPA will assist NPDES

States in issuing major permits and increased emphasis will be placed on assisting NPDES States in eliminating their minor permit backlog, primarily through technical assistance and training.

During 1987, the quality assurance program for NPDES permits will continue to be a priority. Activities include review of selected permits, mid-year Regional and State program evaluations, review of Memoranda of Understanding between EPA and NPDES States, review and assistance in correcting legally deficient State programs, and evaluations of approved POTW and State pretreatment programs.

During 1987, emphasis will be placed on correcting and adjusting approved local and State pretreatment programs to address inconsistencies with national pretreatment requirements and to include new requirements (e.g., local limits to prevent passthrough and interference). EPA will provide assistance to State and local authorities in applying complex national regulations such as the combined waste stream formula and certain mass-based categorical standards. EPA will review POTW applications for removal credits and make industrial user category determinations. EPA will overview approved POTW programs by use of on-site audits to ensure the adequacy of local limits and proper incorporation of categorical standards. In addition, EPA will carry out its responsibilities for direct implementation in the absence of State or local control authorities. The pretreatment regulation revisions will continue.

1986 Program

In 1986, the Agency is allocating a total of $15,759,200 supported by 307.7 total workyears for this program, of which $11,616,300 is from the Salaries and Expenses appropriation and $4,142,900 is from the Abatement, Control and Compliance appropriation.

In 1986, priority is being given to issuing major industrial and municipal permits, particularly in water use-impaired areas and where BAT guidelines have been promulgated, in order to continue reductions in the discharge of pollutants, particularly toxics. Permits with reopener clauses are being modified to incorporate revisions to discharge limitations or other permit conditions. Increased emphasis is being given to issuing minor permits that impact water quality uses, particularly those with toxic discharges. During 1986, EPA is expected to issue 193 major industrial permits, 204 major municipal permits and 626 minor permits.

In 1986, EPA is continuing to address evidentiary hearing requests and is acting on approximately 55 variance requests.

During 1986, two States are expected to receive full NPDES authority and seven States are expected to receive approval for pretreatment and/or federal facility authority. EPA is continuing to assist NPDES States in reducing their permit backlogs and reviewing the quality of selected NPDES State permits and State regulations to assure consistency with Federal requirements.

EPA is reviewing and approving the remaining local pretreatment programs required by federal regulation. EPA is reviewing removal credit applications from POTWs, baseline monitoring reports from indirect industries and annual reports on pretreatment program status from POTWs. The overview of approved programs by use of on-site audits is continuing. EPA is expecting to conduct 136 audits. A pretreatment regulatory package is being promulgated reflecting final definitions and proposed changes implementing Pretreatment Implementation Review Task Force (PIRT) recommendations.

1985 Accomplishments

In 1985, the Agency obligated $15,895,700 supported by 315.0 total workyears, of which $12,105,400 was from the Salaries and Expenses appropriation and $3,790,300 was from the Abatement, Control and Compliance appropriation. The contract resources in 1985 were directed at assistance to POTWs and States in implementing the approved programs and assistance for NPDES State permit issuance and evidentiary hearing support.

EPA issued a total of 488 major and 1061 minor permits. Of these 1,549 permits, 860 were industrial (210 majors) and 689 were municipal (278 majors).

In 1985, one previously approved NPDES State received pretreatment authorization.

During 1985, EPA continued to assist POTWs in the development of local pretreatment programs. EPA approved 202 POTW pretreatment programs (pretreatment States approved 331). EPA performed one State pretreatment program audit and 59 local pretreatment program audits. The pretreatment regulation package for reinstatement of FDF's for indirect dischargers was promulgated in 1985.

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DRINKING WATER

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$26,649.6	$29,246.3	$28,924.5	-$1,243.8	$27,680.7	$28,378.5	$697.8
Abatement Control and Compliance	$44,431.3	$44,653.2	$47,263.2	-$2,032.4	$45,230.8	$42,863.0	-$2,367.8
Research & Development	$14,164.0	$14,226.3	$15,042.7	-$647.0	$14,395.7	$12,885.0	-$1,510.7
TOTAL, Drinking Water	$85,244.9	$88,125.8	$91,230.4	-$3,923.2	$87,307.2	$84,126.5	-$3,180.7
PERMANENT WORKYEARS	543.4	584.5	595.8		595.8	587.8	-8.0
TOTAL WORKYEARS	604.3	642.3	639.8		639.8	639.8	
OUTLAYS	$86,081.7	$98,286.3	$87,423.1	-$2,356.7	$85,066.4	$83,434.7	-$1,631.7
AUTHORIZATION LEVELS	Authorization for the Safe Drinking Water Act expired September 30, 1982. Reauthorization is pending.						

DRINKING WATER

OVERVIEW & STRATEGY

The Safe Drinking Water Act (SDWA) requires EPA to ensure that the Nation's drinking water supplies are free of contamination which may pose a public health risk. The Act also mandates a national Underground Injection Control (UIC) program to protect underground sources of drinking water. In addition, the 1984 Ground-Water Protection Strategy provides EPA with a framework for the protection and clean-up of the Nation's ground water resources.

EPA is required to set national drinking water standards for public water systems and minimum requirements for the Public Water Systems Supervision (PWS) and UIC programs. The States retain the lead role of administering and enforcing regulatory provisions established by EPA for the PWS and UIC programs. EPA will directly implement a program and enforce regulations only when a State fails to assume primary enforcement responsibility or enforce regulations effectively. In assuming primacy, the State may establish more stringent and comprehensive standards and requirements. The SDWA also provides Federal financial and technical assistance to States to help them carry out their responsibilities.

The Agency's strategy to promote State primacy as the first step in implementing the PWS program has succeeded with virtually nationwide delegation. In 1987, 54 States will have assumed primary enforcement authority for the PWS supervision program, which will lead to marked progress in PWS compliance. EPA is trying to build a similar record of successful delegation for the emerging UIC program: at the beginning of 1987 we expect 41 States will have primacy over all or part of the UIC requirements. The Agency has recently completed nationwide implementation of UIC programs through a combination of primacy delegations and direct implementation regulations.

The 1987 Drinking Water request focuses on several major objectives to meet the requirements of the SDWA: (1) revise current health protection standards; (2) implement and enforce UIC; (3) improve PWS compliance; (4) address emerging contamination problems; (4) pursue ground water protection; and (6) continue research and development.

Revise Current Health Protection Standards

Since 1977, EPA and the States have been supervising the safety of public water supplies through Interim National Primary Drinking Water Regulations (NPDWR) for drinking water contaminants which have traditionally been of concern. The SDWA mandates Revised NPDWRs to stand as comprehensive protection against drinking water health risks posed by natural or synthetic contaminants. Revisions will incorporate accumulated scientific health research and innovations in treatment technology. The Revisions will also present an opportunity to reduce unnecessary administrative burdens based on the experience EPA and the States have acquired with interim regulations.

Revised NPDWRs may take the form of numeric Maximum Contaminant Levels (MCLs) or treatment requirements. In either case, a separate "Recommended MCL" (RMCL) is first established for every contaminant to be regulated. RMCLs are health goals which are set at a level where "no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety."

Since the SDWA requires primary regulations for "contaminants which ... may have any adverse effect on the health of persons," a large number of contaminants must be evaluated and the task of evaluating risks and developing contaminant standards must be carried out in phases. Phase I addresses volatile organic chemicals (VOCs) frequently encountered within ground water source systems. Phase II pertains to 42 contaminants (pesticides, synthetic organic chemicals, inorganics, and microbiological contaminants). Phase III addresses radionuclides, including both naturally occurring (radium, radon, uranium) and man-made contaminants. Phase IV encompasses disinfection and disinfection by-products along with the review of the trihalomethane MCL. As Phases I-IV are completed in 1987 and beyond, the 22 existing interim standards will be supplanted with approximately 60 standards, as well as treatment technology requirements aimed at control of waterborne disease outbreaks. Nonetheless, the Agency continues to look at several more contaminants while data is being collected on their occurrence, health effects, and treatment and/or measurement in drinking water.

Complementing enforceable regulations are health advisories, which serve as guidance relating to the toxicology of unregulated contaminants. In 1987, health advisories and a health advisory registry will be developed to disseminate information on toxic substances to an increasing number of clients beyond traditional drinking water agencies. Such preliminary benchmarks can be on hand far sooner than formal primary standards and can be made available to State and local authorities in the event contamination is detected. Other advisories will be developed to support the unregulated contaminant surveillance program and the National Pesticides Survey. The health advisories and MCLs will also be used to support Resource Conservation and Recovery Act (RCRA) waste banning decisions, Superfund clean-up activities, and control actions for agricultural chemicals.

Implement and Enforce Underground Injection Control

The major objective of the UIC program will be to ensure the establishment and implementation of approved UIC programs by States or by EPA where States have not assumed enforcement responsibilities. Permitting and compliance with permit and statutory requirements will continue to be a high program priority. State and EPA programs will see that the growing number of permitted wells operate in conformance with permit requirements. A field presence will be established to identify compliance problems requiring correction. This will include witnessing and reviewing the performance of mechanical integrity tests, review of well records for wells authorized by rule, on-site inspections, maintenance and update of current well inventories, tracking compliance with permit conditions and/or rule requirements and technical assistance to well operators. Where a State does not or cannot respond to significant violations in a timely and appropriate manner, EPA will initiate formal enforcement actions.

Improve PWS Compliance

At the same time as compliance with existing standards receives greater emphasis, both the States and EPA must also prepare to implement and enforce a wide range of new contaminant standards resulting from NPDWR revision. Primacy States must be prepared to implement the Phase I MCLs for Volatile Organic Chemicals (VOCs), which are scheduled to be effective in 1988. The States will also ensure that public water systems initiate the first round of contaminant monitoring and reporting requirements, including monitoring for approximately 50 unregulated contaminants.

Despite continuing progress in compliance with existing standards, there are two percent of community water systems across the country that persistently fail to provide drinking water that meets minimum basic microbiological health standards. In 1987, EPA and the States will take action in reducing the number of persistent violators in both primacy and non-primacy States. Where primacy States do not take corrective action, Federal enforcement actions will be initiated.

Address Emerging Contamination Problems

In order to anticipate and manage potential problems before they pose substantial human health risks, we are continuing to collect occurrence data on contaminants not already regulated. Under the Phase I regulations, public water systems will be required to monitor for as many as 50 additional unregulated VOCs. This monitoring will give consumers information on unregulated contaminants in the water they drink, help the Agency evaluate health risks, and guide future regulatory requirements.

Pesticides contamination incidents are an important and emerging problem across the nation. There are hundreds of constituent pesticide chemicals in use that may have the potential for migrating into surface and ground water; the public health threat of these pesticide contaminants is uncertain. With more comprehensive and reliable occurrence data, EPA should be able to evaluate the need for new regulatory action based on solid evidence of the magnitude of exposure. Together, the Office of Drinking Water and Office of Pesticides Programs are conducting a nationwide survey of pesticide contamination of ground water supplies to characterize the occurrence of selected pesticides in drinking water derived from ground water, determine the relationship between ground-water contamination and the characteristics of pesticide usage and the hydrogeologic environment, and estimate human exposure to these chemicals. By 1987, sampling and analysis for as many as 50 active ingredients and numerous transformation products will be fully underway: ultimately, samples from 1500 locations will be analyzed.

Pursue Ground Water Protection

The Agency's principal objectives are articulated in the Ground-Water Protection Strategy issued in 1984. First, the most effective and broadly acceptable way to increase the national capability to protect ground water is to strengthen State programs. EPA will encourage States to make use of existing grant programs to develop ground-water protection strategies and programs, and work with States to develop institutional capabilities.

A second objective is to address the problems from local contamination sources that in aggregate are of particular national concern, for example, pesticides, septic tanks, highway de-icing, and roadcoatings. EPA is evaluating the threats from these sources and taking appropriate steps under existing legislative authorities. Third, a fundamental part of the Strategy is a policy to set priorities for ground-water protection according to use and relative vulnerability to contamination, based on three classes of ground water. The Agency will implement guidelines to define ground water for use in making protection and cleanup decisions in EPA programs. Fourth, EPA will use existing data systems to develop the ability to synthesize other systems and to shape and analyze ground water-related systems. Another major area of activity is the development of a public information program to inform the public on ground water issues and EPA protection initiatives.

Continue Research and Development

EPA's drinking water research program provides support to States and the drinking water regulatory program in implementing the SDWA in the areas of contaminant occurrence and health effects, analytical methodology, quality assurance technologies, control technology and related costs, and the protection of ground-water resources.

The research program will continue to support the Office of Drinking Water in its effort to develop maximum contaminant levels and health advisories for specific chemicals found in drinking water. This effort will be directed at developing toxicological data to support development of RMCLs and filling in toxicological data gaps for existing chemicals. Microbiological research will continue to evaluate methods for isolating, identifying and characterizing the health effects of pathogens. Epidemiological studies will be conducted relating to drinking water quality and cardiovascular disease and an epidemiological study will be conducted on the relationship between radon in drinking water and lung cancer.

This program will evaluate processes for removal of VOCs, pesticides and radionuclides for use in regulation development and implementation. Disinfectant effectiveness and factors contributing to microbial deterioration of water quality in distribution systems will be evaluated.

The research program will continue to focus on methods development for ground-water investigations and studies of subsurface transport and fate processes such as sorption, biological transformation, redox, hydrolysis, and ion exchange. Research will include looking at identification and assessment technologies for improving injection well practices, assessing fluid movement from injection wells and developing laser-induced fluorescence for monitoring ground water by fiber optics. This work is coordinated with research in Hazardous Waste which provides models and field evaluation. Research to determine the feasibility and effectiveness of in situ aquifer restoration techniques will continue.

Field evaluations of movement and transformation of wastes from underground injection wells will continue. Continued support for UIC research will provide more confidence in our ability to evaluate the risk posed by this method of waste disposal. A pilot program will be initiated to charge to public and private users for certain quality assurance services provided by EPA.

DRINKING WATER

PROGRAM ACTIVITIES	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
Incremental Outputs					
UIC Permit Determinations:					
- for existing and new facilities, by primacy States..................	180 1/	150 1/	6,541 2/	6,501 2/	-40
- for existing and new facilities, by EPA.......	424	650	660	624	-36
Enforcement Actions - PWS:					
Inspections................	N/A				
Notices of Violations......	N/A				
Administrative Orders......	3				
Civil Litigation (new).....	6	15 3/	10	10	0
Criminal Litigation........	0	0	0	0	0
Enforcement Actions - UIC:					
Inspections................	48,300		34,178	31,463	-2,715
Notices of Violations......	N/A				
Administrative Orders......	N/A				
Civil Litigation (new).....	2	0	5	5	0
Criminal Litigation........	0	0	0	0	0
Cumulative Outputs:					
PWS Primacy States..........	53	53	54	54	0
UIC Primacy States (full and partial programs).........	38	42	38	41	+3
Designated Sole Source Aquifers..................	21	27	24	27	+3
Percent of Community Water System (CWS) in Compliance with Microbiological MCL..	90.4%	93.5%	91.4%	92.8%	+1.4%
Percent of CWSs in Compliance with Microbiological Monitoring/Reporting (M/R) Requirements..............	77.1%	86.5%	79.4%	81.8%	+2.4%
Percent of CWSs in Compliance with Turbidity MCL...	96.9%	97%	97.3%	97.6%	+0.3%
Percent of CWSs in Compliance with Turbidity M/R Requirements..............	91.5%	93%	92.3%	92.8%	+0.5%

1/ Includes existing Class I and III wells.

2/ Includes existing and new Class I, III, V, and new Class II wells.

3/ 1986 budget estimate of 41 includes 15 new and 26 ongoing civil litigations.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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DRINKING WATER

Drinking Water Research

PROGRAM	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Scientific Assessment - Drinking Water							
Salaries & Expenses	$350.7	$423.6	$423.6	-$18.1	$405.5	$349.2	-$56.3
Research & Development	$74.6	$75.0	$68.8	-$3.0	$65.8	$248.0	$182.2
TOTAL	$425.3	$498.6	$492.4	-$21.1	$471.3	$597.2	$125.9
Monitoring Systems & Quality Assurance - Drinking Water							
Salaries & Expenses	$1,538.1	$1,610.3	$1,596.8	-$68.6	$1,528.2	$1,596.8	$68.6
Research & Development	$1,165.4	$1,487.9	$1,357.5	-$58.4	$1,299.1	$1,217.0	-$82.1
TOTAL	$2,703.5	$3,098.2	$2,954.3	-$127.0	$2,827.3	$2,813.8	-$13.5
Health Effects - Drinking Water							
Salaries & Expenses	$3,121.3	$3,410.6	$3,407.5	-$146.4	$3,261.1	$3,372.7	$111.6
Research & Development	$5,894.0	$6,525.9	$6,306.5	-$271.2	$6,035.3	$6,395.0	$359.7
TOTAL	$9,015.3	$9,936.5	$9,714.0	-$417.6	$9,296.4	$9,767.7	$471.3
Environmental Engineering & Technology - Drinking Water							
Salaries & Expenses	$2,756.7	$3,021.4	$3,239.1	-$139.4	$3,099.7	$2,973.8	-$125.9
Research & Development	$3,101.7	$2,169.3	$2,962.7	-$127.4	$2,835.3	$1,343.0	-$1,492.3
TOTAL	$5,858.4	$5,190.7	$6,201.8	-$266.8	$5,935.0	$4,316.8	-$1,618.2

DRINKING WATER

Drinking Water Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Environmental Processes & Effects - Drinking Water							
Salaries & Expenses	$1,395.3	$1,515.3	$1,527.6	-$65.7	$1,461.9	$1,320.6	-$141.3
Research & Development	$3,928.3	$3,968.2	$4,347.2	-$187.0	$4,160.2	$3,682.0	-$478.2
TOTAL	$5,323.6	$5,483.5	$5,874.8	-$252.7	$5,622.1	$5,002.6	-$619.5
TOTAL:							
Salaries & Expenses	$9,162.1	$9,981.2	$10,194.6	-$438.2	$9,756.4	$9,613.1	-$143.3
Research & Development	$14,164.0	$14,226.3	$15,042.7	-$647.0	$14,395.7	$12,885.0	-$1,510.7
Drinking Water Research TOTAL	$23,326.1	$24,207.5	$25,237.3	-$1,085.2	$24,152.1	$22,498.1	-$1,654.0
PERMANENT WORKYEARS							
Scientific Assessment - Drinking Water	7.2	8.0	7.0		7.0	7.0	
Monitoring Systems & Quality Assurance - Drinking Water	27.5	27.1	27.1		27.1	27.1	
Health Effects - Drinking Water	50.5	62.5	68.5		68.5	60.5	-8.0
Environmental Engineering & Technology - Drinking Water	51.3	48.1	55.3		55.3	55.3	

DRINKING WATER

Drinking Water Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Environmental Processes & Effects - Drinking Water	26.0	22.3	22.3		22.3	22.3	
TOTAL PERMANENT WORKYEARS	162.5	168.0	180.2		180.2	172.2	-8.0
TOTAL WORKYEARS							
Scientific Assessment - Drinking Water	9.1	9.0	9.0		9.0	9.0	
Monitoring Systems & Quality Assurance - Drinking Water	28.5	30.1	29.8		29.8	29.8	
Health Effects - Drinking Water	58.6	69.5	68.5		68.5	68.5	
Environmental Engineering & Technology - Drinking Water	57.0	59.3	58.4		58.4	58.4	
Environmental Processes & Effects - Drinking Water	28.7	24.5	24.3		24.3	24.3	
TOTAL WORKYEARS	181.9	192.4	190.0		190.0	190.0	

DRINKING WATER

Drinking Water Research

Principal Outputs by Objective

1987 PLANNED OUTPUTS
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Objective 1: Develop Drinking Water Standards Based on Health Effects Through Risk Assessment Studies

- o Develop health advisories and criteria documents (Sci. Assessment)
- o Report on the carcinogenic and target organ toxicity of major chemical contaminants in drinking water (Health)
- o Report on the cardiovascular disease risk factors in populations supplied with chlorinated and non-chlorinated drinking water of varying hardness (Health)
- o Determination of virulence and growth conditions of Legionella (Health)

Objective 2: Provide Engineering Technologies and Monitoring Data for Drinking Water Standards

- o Testing and validation of radionuclide procedures for thorium, polonium 210, lead 210 and plutonium (Monitoring)
- o Report on radiation methods validation and on the intercomparison program for radiation quality assurance (Monitoring)
- o Report on laboratory certification for 10 regions (Monitoring)
- o Report on control of lead solder corrosion (Engineering)
- o Report on the costs of selected water supply systems - compliance vs. noncompliance (Engineering)
- o State-of-the-art report on removal of organic materials from drinking water (Engineering)

Objective 3: Provide Scientific Methods and Data for Protection of Ground-water Resources

- o Airborne and ground-based environmental monitoring to detect brine contamination from injection wells. (Monitoring)
- o Report on sources of variability affecting ground-water monitoring data (Monitoring)
- o Training course presentation materials on conducting ground-water investigations (Env. Processes)
- o Report on cement bonding of injection wells (Env. Processes)
- o State-of-the-art report on interaction of injected fluids with geologic materials (Env. Processes)

1986 PLANNED OUTPUTS
====================

Objective 1: Develop Drinking Water Standards Based on Health Effects Through Risk Assessment Studies

- o Criteria documents for drinking water disinfectants and disinfection by-products (Sci. Assessment)
- o Drinking water criteria documents and health advisories (Sci. Assessment)
- o Report on the occurrence and significance of viruses in drinking water (Health)
- o Report on the clinical study of the health effects of ingesting chlorinated drinking water (Health)

- Report on the toxicological effects of three (xylene, dichloropropane, chloroacetic acid) drinking water contaminants (Health)

Objective 2: Provide Engineering Technologies and Monitoring Data for Drinking Water Standards

- Report on national inorganic radionuclide survey providing radiochemical and inorganic analytical data for drinking water (Monitoring)
- Report on the presence-absence test in small water systems (Monitoring)
- Report on pathogen inactivation (Engineering)
- Report on removal of pesticides from drinking water (Engineering)
- Report on methods for removal of radium from drinking water (Engineering)

Objective 3: Provide Scientific Methods and Data for Protection of Ground-water Resources

- Evaluation and development of laser-induced fluorescence for monitoring ground-water using fiber optics (Monitoring)
- Provision of data and methods to support ground-water regulations, enforcement, management programs (Monitoring)
- Publish a training manual for Ground-water Contaminant Modeling (Env. Processes)
- Report on Case Study of Class I (industrial) Injection Wells (Env. Processes)

1985 ACTUAL OUTPUTS

Objective 1: Develop Drinking Water Standards Based on Health Effects through Risk Assessment Studies

- Publish 28 final drinking water criteria documents (Sci. Assessment)
- Development of improved immunological methods for detecting Giardia (Health)
- Report on the target organ effects from subchronic exposure to carbon tetrachloride (Health)

Objective 2: Provide Engineering Technologies and Monitoring Data for Drinking Water Standards

- Report on evaluation of monitoring methods for radionuclides in drinking water (Monitoring)
- Annual reports on laboratory certification regional program, traceability of National Bureau of Standards and reference analytical services (Monitoring)
- Report on microbial quality considerations in distribution systems (Engineering)
- Report on methods of biological sample preservation (Monitoring)
- Report on bacterial transport by carbon particles passing through water treatment plants (Engineering)

Objective 3: Provide Scientific Methods and Data for Protection of Ground-water Resources

- Report on fiber optics for monitoring ground-water contaminants (Monitoring)
- Publish state-of-the-art report on aquifer restoration techniques (Env. Processes)
- An introduction to ground-water tracers manual (Env. Processes)

DRINKING WATER

Drinking Water Research

Budget Request

The Agency requests a total of $22,498,100 supported by 190.0 total workyears for 1987, a decrease of $1,654,000 and no change in total workyears from 1986. Of the request, $9,613,100 will be for the Salaries and Expenses appropriation and $12,885,000 will be for the Research and Development appropriation, a decrease of $143,300 and $1,510,700, respectively.

Program Description

The Drinking Water research program provides support to States and the EPA Office of Drinking Water (ODW) in implementing the Safe Drinking Water Act (SDWA) in the areas of contaminant occurrence and health effects, analytical methodology, control technology and related costs, and the protection of ground-water resources.

Objective 1: Develop Drinking Water Standards Based on Health Effects Through Risk Assessment Studies. Research in this activity provides health assessment information to support the Office of Drinking Water in developing revised regulations to control drinking water contaminants under Section 1412 of the SDWA. The health research program also assists States in ascertaining causes of waterborne infectious disease outbreaks and determining the hazard to humans from exposure to infectious agents through drinking water.

Objective 2: Provide Engineering Technologies and Monitoring Data for Drinking Water Standards. Research supporting this objective provides analytical procedures to monitor drinking water contaminants. In addition, engineering research will evaluate treatment processes and costs to support ODW regulatory decision-making.

Objective 3: Provide Scientific Methods and Data for Protection of Groundwater Resources. Work in this category will provide the scientific basis for the protection of underground drinking water sources to implement Section 1421 and 1414 of the SDWA. These efforts are coordinated with the pesticides and hazardous waste programs.

SCIENTIFIC ASSESSMENT

1987 Program Request

The Agency requests a total of $597,200 supported by 9.0 total workyears for this program, of which $349,200 will be for the Salaries and Expenses appropriation and $248,000 will be for the Research and Development appropriation. This represents a decrease of $56,300 and an increase of $182,200, respectively, and no change in total workyears. The net increase will be used to develop methods for evaluating health hazards associated with potable reuse of wastewater, and additional health advisories for specified chemicals.

Develop Drinking Water Standards Based on Health Effects Through Risk Assessment Studies. Research will provide water criteria and assessment documents for drinking water contaminants of disinfectants and their by-products. The program will continue to provide technical support and assistance in response to Regional and State requests. Research will also continue to maintain state-of-the-art methodology for assessment of potential risk to human health from exposure to constituents found in drinking water.

1986 Program

In 1986, the Agency is allocating a total of $471,300 supported by 9.0 total workyears for this program, of which $405,500 is from the Salaries and Expenses appropriation and $65,800 is from the Research and Development appropriation.

In 1986, this program is finalizing drinking water criteria documents for drinking water contaminants, disinfectants and Phase V chemicals and initiating documentation in support of health advisories.

1985 Accomplishments

In 1985, the Agency obligated a total of $425,300 supported by 9.1 total workyears for this program, of which $350,700 was from the Salaries and Expenses appropriation and $74,600 was from the Research and Development appropriation.

Major accomplishments included the initiation of criteria documents for drinking water Phase IV chemicals and documentation for eight Phase V chemicals, including health advisory levels.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Program Request

The Agency requests a total of $2,813,800 supported by 29.8 total workyears for this program, of which $1,596,800 will be for the Salaries and Expenses appropriation and $1,217,000 will be for the Research and Development appropriation. This represents an increase of $68,600 and a decrease of $82,100, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects a pilot effort to externalize quality assurance (QA) costs. This effort will involve charging of fees to public and private users for QA services (e.g., quality control check samples).

Provide Engineering Technologies and Monitoring Data for Drinking Water Standards. The program will distribute quality control samples and conduct Performance Evaluation studies. Method validation studies will be conducted for organic contaminants newly regulated under the Safe Drinking Water Act. The program will evaluate 10 regions and personnel for capabilities to provide quality data in support of the National Interim Primary Drinking Water Regulations monitoring program.

Provide Scientific Methods and Data for Protection of Ground-water Resources. Research will continue to provide both technical information and improved methods for predicting contaminant movement and transformation. Research will include looking at identification and assessment technologies for improving injection well practices, assessing fluid movement from injection wells and developing laser induced fluorescence for monitoring ground water by fiber optics.

1986 Program

In 1986, the Agency is allocating a total of $2,827,300 supported by 29.8 total workyears for this program, of which $1,528,200 is from the Salaries and Expenses appropriation and $1,299,100 is from the Research and Development appropriation.

In 1986, the monitoring program is expediting methods validation work to meet the new drinking water regulations for organic chemical contaminants. The program provides analytical procedures to monitor drinking water contaminants including development of procedures for analysis of radioactive contaminants and improved coliform analysis methods.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,703,500 supported by 28.5 total workyears for this program, of which $1,538,100 was from the Salaries and Expenses appropriation and $1,165,400 was from the Research and Development appropriation.

Reports were published on the evaluation of monitoring methods for radionuclides in drinking water and on the validation of radiation methods. The program maintained and distributed 55,000 quality assurance and performance evaluation samples. The program also produced a report on the use of fiber optics for monitoring ground-water contaminants.

HEALTH EFFECTS

1987 Program Request

The Agency requests a total of $9,767,700 supported by 68.5 total workyears for this program, of which $3,372,700 will be for the Salaries and Expenses appropriation and $6,395,000 will be for the Research and Development appropriation. This represents an increase of $111,600 and $359,700, respectively, and no change in total workyears. The increase will support the development of methods to determine risk from exposure to mixtures of chemicals instead of single chemicals.

Develop Drinking Water Standards Based on Health Effects Through Risk Assessment Studies. The health research program will continue to support ODW in its effort to develop maximum contaminant levels and Health Advisories for specific chemicals found in drinking water. This effort will be directed at developing toxicological data to support development of Acceptable Daily Intake levels and filling in toxicological data gaps for existing chemicals found in drinking water and recently identified for regulation. Also, toxicological data will be developed on disinfectants and disinfectant by-products with emphasis on effects expressed *in vivo* from residual disinfectants in drinking water.

Microbiological research will continue to evaluate methods for isolating, identifying and characterizing the health effects of pathogens. A research effort will begin to determine the public health significance of the occurrence of microbiological agents in drinking water and relate the health effects to an appropriate indicator.

Epidemiological studies will be conducted relating drinking water quality to cardiovascular disease. An epidemiological study will be conducted on the relationship between radon in drinking water and lung cancer. Assistance will be provided to states during waterborne disease outbreaks which will help stop and prevent transmission of disease from contaminated water. An epidemiology study will be conducted to determine the relationship between *Legionella* occurrence in drinking water and disease in susceptible populations.

Research will be conducted on the interactive toxicity of chemicals that occur in drinking water. Research results from past studies on techniques for preparing representative samples of organic concentrates will be consolidated. These techniques will then be used to prepare samples for testing in health bioassays to determine the potential health effects from complex mixtures in drinking water.

1986 Program

In 1986, the Agency is allocating a total of $9,296,400 supported by 68.5 total workyears for this program, of which $3,261,100 is from the Salaries and Expenses appropriation and $6,035,300 is from the Research and Development appropriation.

The health research program continues to provide a scientific base for the Agency and States to use in identifying and controlling harmful contaminants in drinking water. Research is focused on those areas identified by ODW which support their regulatory efforts. This includes research on disinfectants, organic contaminants, waterborne pathogens and disease, inorganic chemicals and water treatment chemicals.

1985 Accomplishments

In 1985, the Agency obligated a total of $9,015,300 supported by 58.6 total workyears for this program, of which $3,121,300 was from the Salaries and Expenses appropriation and $5,894,000 was from the Research and Development appropriation.

In 1985 the program developed improved immunological methods for detecting Giardia. Two important studies were completed and reports issued: A Report on the Target Organ Effects from Subchronic Exposures to Carbon Tetrachloride and a Report on the Influence of Corn Oil on the Toxicity of Chloroform and other Chlorinated Hydrocarbons in Drinking Water.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $4,316,800 supported by 58.4 total workyears for this program, of which $2,973,800 will be for the Salaries and Expenses appropriation and $1,343,000 will be for the Research and Development appropriation. This represents a decrease of $125,900 and $1,492,300, respectively, and no change in total workyears. The reduction reflects the completion of several research projects related to the practical operation of water utilities and field scale evaluations for removal of organics.

Provide Engineering Technologies and Monitoring Data for Drinking Water Standards. This program will continue to provide evaluation of processes for removal of volatile organic compounds (VOCs), pesticides and radionuclides for use in regulation implementation. It will provide information on treatment systems performances and costs to permit cost-effectiveness analyses of proposed treatment systems. The program will provide evaluations of disinfectant effectiveness and factors contributing to microbial deterioration of water quality in distribution systems. Research emphasizing technologies especially adaptable to small systems will continue.

1986 Program

In 1986, the Agency is allocating a total of $5,935,000 supported by 58.4 total workyears for this program, of which $3,099,700 is from the Salaries and Expenses appropriation and $2,835,300 is from the Research and Development appropriation.

Research is continuing to evaluate treatment processes and costs to support ODW regulatory decision-making. Cost data is being compiled for unit processes to do cost-effectiveness analyses of proposed treatment systems. Factors which contribute to deterioration of water quality in distribution systems and methods for control are being investigated. Work on lead standard compliance problems due to lead/tin solders in plumbing systems is being completed. Research work emphasizing technology particularly adaptable to small systems is also being continued.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,858,400 supported by 57.0 total workyears for this program, of which 2,756,700 was from the Salaries and Expenses appropriation and $3,101,700 was from the Research and Development appropriation.

Major accomplishments included publication of the following reports: Removal of Radionuclides from Drinking Water, Problem of Microbial Protection of Invertebrates, Microbial Quality Considerations in Distribution Systems, and Biological Sample Preservation.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests a total of $5,002,600 supported by 24.3 total workyears for thi~~s program,~~ of which $1,320,600 will be for the Salaries and Expenses appropriation and $3,682,000 will be for the Research and Development appropriation. This represents a decrease of $141,300 and $478,200, respectively, and no change in total workyears. The decrease reflects the completion of several studies related to basic process research.

Provide Scientific Methods and Data for Protection of Ground-water Resources. This program will continue to focus on methods development and studies of subsurface transport and fate processes such as sorption, biological transformation, redox, hydrolysis and ion exchange. Research to determine the cost-effectiveness of in-situ aquifer restoration techniques will continue, leading to cleanup where previously the cost was prohibitive. This work is coordinated with the Hazardous Waste and Pesticides Programs.

Field evaluation of movement and transformation of wastes from underground injection wells will continue. Continued support for Underground Injection Control (UIC) research work will provide more confidence that this method for waste disposal is safe and cost-effective.

Joint studies will also continue with the People's Republic of China in the area of transport and fate and ecological effects of ground-water contaminants.

1986 Program

In 1986, the Agency is allocating a total of $5,622,100 supported by 24.3 total workyears for this program, of which $1,461,900 is from the Salaries and Expenses appropriation and $4,160,200 is from the Research and Development appropriation.

Research is focused on developing and improving methods for predicting the impacts of contamination on underground sources of drinking water as well as providing for information transfer for the National Groundwater Information Center and the International Groundwater Modeling Center. The program is determining the cost-effectiveness of in-situ aquifer restoration techniques and supports the Underground Injection Control (UIC) regulations by studying the fate and transport of wastes in and from the injection zone.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,323,600 supported by 28.7 total workyears for this program, of which $1,395,300 was from the Salaries and Expenses appropriation and $3,928,300 was from the Research and Development appropriation.

In 1985, major accomplishments included completion of a field facility for determining the adequacy and accuracy of cement bonding and mechanical integrity tests for injection wells. A report on state-of-the-art aquifer restoration techniques was published. A technique for causing subsurface biodegradation of trichloroethylene was discovered. Two manuals were published to aid implementation of ground-water monitoring programs: A Practical Guide for Ground-water Sampling and An Introduction to Ground-water Tracers.

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DRINKING WATER

Drinking Water Criteria, Standards & Guidelines

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Criteria, Standards & Guidelines								
Salaries & Expenses		$5,711.3	$5,593.3	$5,539.2	-$238.4	$5,300.8	$5,580.9	$280.1
Abatement Control and Compliance		$4,405.6	$5,103.0	$5,103.0	-$219.5	$4,883.5	$5,003.0	$119.5
	TOTAL	$10,116.9	$10,696.3	$10,642.2	-$457.9	$10,184.3	$10,583.9	$399.6
TOTAL:								
Salaries & Expenses		$5,711.3	$5,593.3	$5,539.2	-$238.4	$5,300.8	$5,580.9	$280.1
Abatement Control and Compliance		$4,405.6	$5,103.0	$5,103.0	-$219.5	$4,883.5	$5,003.0	$119.5
Drinking Water Criteria, Standards & Guidelines	TOTAL	$10,116.9	$10,696.3	$10,642.2	-$457.9	$10,184.3	$10,583.9	$399.6
PERMANENT WORKYEARS								
Criteria, Standards & Guidelines		90.0	93.6	93.6		93.6	93.6	
TOTAL PERMANENT WORKYEARS		90.0	93.6	93.6		93.6	93.6	

DRINKING WATER

Drinking Water Criteria, Standards & Guidelines

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Criteria, Standards & Guidelines	101.7	101.8	101.8		101.8	101.8	
TOTAL WORKYEARS	101.7	101.8	101.8		101.8	101.8	

DRINKING WATER

Drinking Water Criteria, Standards and Guidelines

Budget Request

The Agency requests a total of $10,583,900 supported by 101.8 total workyears for 1987, a increase of $399,600 and no change in total workyears from 1986. Of the request, $5,580,900 will be for the Salaries and Expenses appropriation and $5,003,000 will be for the Abatement, Control and Compliance appropriation, an increase of $280,100 and $119,500, respectively.

Program Description

Criteria, Standards and Guidelines -- The program is dedicated to the identification of drinking water contaminants that may have any adverse effect on human health, the determination of the contaminant levels that serve to protect against such effects, the development of enforceable standards and regulations and the implementation and oversight of the Public Water Systems Supervision (PWS) and Underground Injection Control (UIC) programs.

The Safe Drinking Water Act (SDWA) mandates that EPA develop revised National Primary Drinking Water Regulations (NPDWRs) to stand as comprehensive protection against adverse health effects posed by natural and synthetic toxic contaminants. Revised NPDWRs may take the form of numerical Maximum Contaminant Levels (MCLs) or a treatment-based requirement. In either case, a separate "Recommended MCL" (RMCL) is first established for every contaminant to be regulated, representing a health-based goal. For those contaminants found to be measurable at the system level with workable, affordable analytic technology, the MCL is set as close to the RMCL as feasible, taking into account the performance and cost of the best "generally available" treatment technology. Otherwise, a treatment requirement, prescribing such "generally available" technology, can be promulgated. Complementing these enforceable, primary standards are health advisories, nonenforceable guidance pertaining to the toxicology of contaminants with limited, localized occurrence or not yet regulated.

The Headquarters program shares in the implementation of the PWS and UIC programs by providing implementation tools (such as guidance documents and technical materials) and technical assistance. This program also tracks national environmental progress, establishing performance measures and compiling data on national compliance with PWS and UIC regulatory requirements. For this purpose, Headquarters develops and maintains automated data systems; it also maintains central financial management and program planning responsibilities. EPA also has responsibility to provide scientific and technical information to States, localities, and utilities.

CRITERIA, STANDARDS AND GUIDELINES

1987 Program Request

The Agency requests a total of $10,583,900, supported by 101.8 total workyears for this program, of which $5,580,900 will be for the Salaries and Expenses appropriation and $5,003,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $280,100 and $119,500, respectively, with no change in total workyears. The Salaries and Expenses increase reflects increased operating costs. The Abatement, Control and Compliance increase reflects additional resources for the National Pesticide survey and monitoring activities.

EPA will promulgate the first revised NPDWRs, new MCLs for nine volatile organic contaminants (VOCs), including tetrachloroethylene, in late calendar year

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1986. Finalization of Phase II RMCLs and proposal of enforceable MCLs and treatment regulations, dealing with the bulk of known or anticipated contaminant risks (pesticides, synthetic organic chemicals, inorganic chemicals, and microbiological disease agents) will be accomplished in Spring 1987. In addition, Phase III (radionuclides) proposed MCLs (with simultaneous publication of final RMCLs) will also be published.

In 1987, emphasis will increase on the fourth phase of NPDWR revision, which encompasses review of the last Interim MCL, for trihalomethanes (THMs), as well as consideration of disinfectant toxicity and additional disinfectant by-products. RMCLs for THMs, other prevalent by-products and disinfectants will be proposed in 1987.

The four phases of NPDWR revision comprise a comprehensive expansion of public health protection from exposure to toxic substances. The lack of health effects data on many substances, however, will require the Agency to continue its risk assessment process and evaluate new research findings on still unregulated contaminants. Primary regulations will be augmented with additional health advisories, supplying health-based numerical standards for a multitude of toxic substances which may turn up as localized contaminants. Because both the number and the application of these advisories have increased, EPA is developing an electronic-based, multi-access health advisory registry and a formal review system to assure the quality and consistency of scientific content.

Sampling and analysis for the National Pesticide Survey will continue. This nationwide survey of water supply wells, jointly supported by the Drinking Water and Pesticides programs, will involve sampling and analysis from more than 1500 locations as well as scanning for approximately 50 pesticides and their transformation products. Survey results will help the pesticide program determine the relationship between pesticide usage, chemical characteristics, environmental factors and subsequent contamination events; the survey will give the drinking water program occurrence data necessary to estimate human exposure, which will help determine future regulatory development. A general benefit is the demonstration of analytic technologies for monitoring a multitude of synthetic organic compounds. As the survey proceeds in finding problem contaminants, this data can be used to help fashion specific monitoring regulations for "vulnerable" systems to assure the safety of their supplies.

The program will continue to provide national direction, guidance and oversight to UIC programs, to assure consistent regulatory decisions and actions, while implementing a framework and procedures to define and track national environmental results.

1986 Program

In 1986, the Agency is allocating a total of $10,184,300 supported by 101.8 total workyears for this program of which $5,300,800 is from the Salaries and Expenses appropriation and $4,883,500 is from the Abatement, Control and Compliance appropriation.

In November 1985, final RMCLs and simultaneous proposal of enforceable MCLs for 8 Phase I VOCs were published. For one contaminant, tetrachloroethylene, new data necessitated re-proposal of the RMCL; consequently RMCL publication/MCL proposal must occur separately. Phase II RMCLs have also been proposed in November covering 26 organic chemicals and pesticides, 12 inorganic contaminants and 4 categories of microbiological contaminants. A final RMCL and proposed MCL for fluoride has also been issued. In April EPA expects to propose Phase III RMCLs, pertaining to radionuclides.

Incorporated within the Phase I NPDWR proposal is a special monitoring regulation requiring systems to monitor for approximately 50 unregulated VOCs using instrumentation and routines similar to that required for Phase I compliance monitoring. These rules, proposed under the authority of SDWA section 1445(a), are intended to help systems and the public learn more about their own water quality.

Monitoring results will also give EPA a more thorough data base on exposure to these contaminants. Before these rules are promulgated, health advisories for each target contaminant is being developed from available toxicology data to help guide systems or identify prospective health risks posed in the event of a contaminant's detection.

The Agency is completing plans for the National Pesticide Survey. The actual sampling and analysis starts in 1986. At the same time, another survey, the National Inorganics and Radionuclide Survey (NIRS), will be in its final phases of sampling and data compilation.

Full scale implementation of State and Federal UIC programs brings with it the emergence of various technical and programmatic issues which requires the development of a growing number of guidances, technical bulletins and other implementation tools to ensure consistent administration of UIC regulations.

1985 Accomplishments

In 1985, the Agency obligated $10,116,900, supported by 101.7 total workyears, of which $5,711,300 was from the Salaries and Expenses appropriation and $4,405,600 was from the Abatement, Control and Compliance appropriation.

During the year final health criteria documents were prepared for over 70 contaminants under regulatory consideration for Phases I-III. A RMCL for fluoride was proposed in June. A major portion of the NIRS sampling and analysis process was completed in September 1985; 52 health advisories were prepared covering organic and inorganic compounds under Phase I-II consideration and other compounds frequently associated with spills and localized contamination.

With UIC programs effective in December 1984 in the remaining non-primacy jurisdictions, Headquarters focused on providing guidance and technical assistance including completion of a national UIC compliance strategy and development of measures of compliance and environmental payoff.

DRINKING WATER

Drinking Water State Program Resource Assistance

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Public Water Systems Supervision Program Grants								
Abatement Control and Compliance		$28,424.3	$29,450.0	$29,450.0	-$1,266.3	$28,183.7	$28,450.0	$266.3
	TOTAL	$28,424.3	$29,450.0	$29,450.0	-$1,266.3	$28,183.7	$28,450.0	$266.3
Underground Injection Control Program Grants								
Abatement Control and Compliance		$8,312.1	$9,100.2	$9,100.2	-$391.3	$8,708.9	$8,500.0	-$208.9
	TOTAL	$8,312.1	$9,100.2	$9,100.2	-$391.3	$8,708.9	$8,500.0	-$208.9
Special Studies & Demonstrations								
Abatement Control and Compliance		$2,100.0		$2,350.0	-$101.1	$2,248.9		-$2,248.9
	TOTAL	$2,100.0		$2,350.0	-$101.1	$2,248.9		-$2,248.9
Training								
Abatement Control and Compliance		$214.0		$250.0	-$10.8	$239.2		-$239.2
	TOTAL	$214.0		$250.0	-$10.8	$239.2		-$239.2
TOTAL:								
Abatement Control and Compliance		$39,050.4	$38,550.2	$41,150.2	-$1,769.5	$39,380.7	$36,950.0	-$2,430.7
Drinking Water State Program Resource Assistance	TOTAL	$39,050.4	$38,550.2	$41,150.2	-$1,769.5	$39,380.7	$36,950.0	-$2,430.7

DRINKING WATER

Drinking Water State Program Resource Assistance

Budget Request

The Agency requests a total of $36,950,000 for 1987, a decrease of $2,430,700 from 1986. All of the request will be for the Abatement, Control and Compliance appropriation.

Program Description

The intent of the Safe Drinking Water Act is that States should assume the primary role for implementing and enforcing the drinking water and the underground injection control (UIC) regulations. Federal financial assistance, in the form of grants, is provided to States to develop and maintain these programs. To be eligible for grants, States must have primary enforcement responsibility.

Public Water Systems Supervision Program Grants -- The program provides grants to States which have been delegated primary enforcement authority for implementing a Federally-approved Public Water System Supervision (PWS) program. EPA may also use the funds allocated to non-primacy States and Indian lands to defray the cost of Federal implementation of the program, including travel.

Underground Injection Control Program Grants -- This program provides grants to support State activities in implementing the UIC program. As with the PWS program, EPA may use the funds allocated to a non-primacy State and Indian lands for program implementation and travel associated with implementation activities in non-primacy States.

Special Studies and Demonstrations -- This program includes resources for the National Rural Water Association for training and technical assistance to operators of small rural water systems.

Training -- This program includes funds for fellowships to State personnel in the PWS and UIC program areas for academic training and for academic grants.

PUBLIC WATER SYSTEMS SUPERVISION PROGRAM GRANTS

1987 Program Request

The Agency requests a total of $28,450,000 for this program, all of which will be for the Abatement, Control and Compliance appropriation. This represents an increase of $266,300 for State implementation of volatile organic contaminants regulations.

This grant will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs. In 1987, we expect States to continue to emphasize the following activities. The PWS grants will support 54 State primacy programs. During 1987, the States will prepare for the implementation of the volatile organic contaminants (VOC) regulations which will become effective in the Spring of 1988. These regulations cover those volatile organic contaminants frequently encountered in public water systems using ground-water sources and contain analytic and treatment requirements with precision levels well beyond the existing norm for small, groundwater source systems at risk. We expect the States to ensure that public water systems carry out the VOC monitoring and reporting requirements including mandatory monitoring of about 50 unregulated contaminants, a requirement authorized under Section 1445(a) of the SDWA. The States will initiate the first round of contaminant monitoring and, using health advisories, will work with systems to avoid health risks posed by unregulated contaminants.

EPA will encourage the States to redirect their enforcement programs to include violations of the VOC regulations and to ensure that timely and appropriate enforcement actions are initiated against non-complying systems.

State drinking water programs will continue to assume a pivotal role when contamination of drinking water sources is discovered, even in cases where unregulated contaminants are involved. State officials must evaluate the public health risks for those contaminants which EPA has not established an enforceable standard, collecting and interpreting health effects and treatment information to formulate an action plan. The PWS grant funds will continue to support primacy programs as well as EPA direct implementation program activities including analytical services, sanitary surveys, training, data management, disease surveillance, on-site technical activities, and data management.

1986 Program

In 1986, the Agency is allocating a total of $28,183,700 for this program, all of which is from the Abatement, Control and Compliance appropriation.

Fifty-four States are expected to receive grants, and EPA is using the funds allocated to the remaining States for direct implementation activities. EPA is providing transition assistance to Oregon and Pennsylvania.

During 1986, States are focusing on improving the compliance of community water systems with the regulations and working with systems where compliance is declining or progress has not been made. The States are initiating enforcement actions in cases of persistent non-compliance, where there is no evidence that systems will take corrective action. States are expected to initiate 5,700 enforcement actions and conduct 9,000 inspections related to violations. With the growing number of groundwater contamination incidents, State officials increasingly are called upon to gauge the public health risk and arrange the appropriate response. The grants also support program and data management activities.

1985 Accomplishments

In 1985, the Agency obligated a total of $28,424,300 for this program, all of which was from the Abatement, Control and Compliance appropriation.

Fifty-three States including Pennsylvania received grants while EPA used the funds allotted to the non-primacy States for implementation of the Federal program through contracts. The grant funds supported PWS Supervision program operations, including the certification/recertification of an estimated 3,700 laboratories, the conduct of 38,000 routine sanitary surveys and the review of 20,000 plans and specifications. The States continued to focus on improving compliance among public water systems and initiated 4,600 formal enforcement actions and conducted 8,400 violation related inspections.

UNDERGROUND INJECTION CONTROL PROGRAM GRANTS

1987 Program Request

The Agency requests a total of $8,500,000 for this program, all of which will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $208,900. The decrease in Abatement, Control and Compliance reflects progress in UIC permitting.

This grant will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs. In 1987, we expect States to continue to emphasize the following activities.

These funds will support State or EPA programs to protect underground drinking water sources from contamination through underground injection practices. Permitting, which enables States (or EPA) to apply the general UIC requirements to site-specific conditions, will continue to be a high program priority. The priority for permitting remains new wells associated with oil and gas production (Class II), new wells related to deep injection of hazardous and municipal wastes (Class I) (permitting of existing Class I wells will be completed in 1986) and new mining wells (Class III). In primacy States, reviews of well records will be conducted for 20% of the existing Class II wells currently authorized by rule. In addition, States will determine whether to permit miscellaneous wells which fall into the Class V category.

As the State permit workload decreases, the States will be able to devote greater effort to bringing violators into compliance and requiring operators to address actual or potential contamination problems. A field presence will demonstrate to the regulated community that the States will exercise their enforcement authority when necessary. When program operators fail to comply, States will initiate appropriate enforcement actions.

Other activities supported by the grants include: maintaining well inventories, compliance tracking with permit conditions and/or rule requirements, technical assistance to operators, training and other data management activities. When EPA implements a program in a State, the funds will be used to support a similar range of activities.

1986 Program

In 1986, the Agency is allocating a total of $8,708,900 for this program, all of which is from the Abatement, Control and Compliance appropriation.

These funds support programs to protect underground sources of drinking water from contamination through underground injection in all 57 States and Territories, as well as on Indian lands. EPA uses grant funds allotted to 19 full non-primacy and 5 partial non-primacy States and Indian lands to support direct implementation activities. The priorities for permitting by EPA and the States are similar to those in 1987.

Grant funds also support surveillance and compliance activities. The programs' primary means of surveillance is through the receipt and review of operation reports. For this system to be effective, there must be no question about the credibility of operators' data. This requires the program to maintain an effective verification effort. In addition, demonstrated absence of leaks is an important element of compliance. Where violations are evident, appropriate enforcement action is being initiated. States are beginning to emphasize compliance with permit conditions and increasing inspections, mechanical integrity tests (MIT) and surveillance activities.

1985 Accomplishments

In 1985, the Agency obligated a total of $8,312,100 for this program, all of which was from the Abatement, Control and Compliance appropriation.

Thirty-three States achieved full primacy and five had partial primacy by the end of 1985. The States completed 180 permit determinations for existing Class I and Class III wells, reviewed 15,509 records for Class II wells, evaluated tests of 19,848 wells for mechanical integrity and witnessed approximately 25 percent of the MITs. In addition, the State compliance and enforcement activities increased with the completion of 46,282 field inspections and initiation of administrative actions, review of monitoring reports, and initiation of 2 new civil litigations.

SPECIAL STUDIES AND DEMONSTRATIONS

1987 Program Request

No funding is requested for this program. This represents a decrease of $2,248,900 in the Abatement, Control and Compliance appropriation. The decrease represents the Agency's position that the National Rural Water Association has demonstrated the effectiveness of grass roots training and technical assistance programs to benefit small systems and that the individual State associations should be able to move toward self-sufficiency through the use of organizational dues and training fees.

1986 Program

In 1986, the Agency is allocating a total of $2,248,900 for this program, all of which is from the Abatement, Control and Compliance appropriation.

These funds support the training and technical assistance activities of the National Rural Water Association. The National Association, through its 31 currently funded State associations covering 33 States, is providing guidance on ways to promote compliance among rural water systems.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,100,000 for this program, all of which was from the Abatement, Control and Compliance appropriation.

These funds supported the National Rural Water Association's outreach program. The State associations funded a total of 384 workshops in 33 States to train operators of small water systems and provided 3,840 days of technical assistance to these systems.

TRAINING

1987 Program Request

No funds are requested for this program. This represents a decrease of $239,200 in the Abatement, Control and Compliance appropriation. The decrease represents the Agency's view that there are sufficient opportunities for State personnel to obtain training in environmental and public health fields without Federal support.

1986 Program

The Agency is allocating $239,200 for this program, all of which is from the Abatement, Control and Compliance appropriation. These funds will be used to provide fellowships to State agency personnel involved in the administration and implementation of State PWS and UIC programs.

1985 Accomplishments

In 1985, the Agency obligated a total of $214,000 for this program, all of which was from the Abatement, Control and Compliance appropriation.

The funds supported academic training for 84 State agency personnel. Of this total 61 fellowships were awarded to personnel involved in the administration and implementation of State PWS programs and 23 were awarded to personnel involved in the protection of ground water.

DRINKING WATER

Drinking Water Management

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Public Water Systems Supervision Program Assistance								
Salaries & Expenses		$4,726.7	$5,090.5	$5,073.6	-$218.3	$4,855.3	$5,016.6	$161.3
Abatement Control and Compliance		$6.0		$10.0	-$0.4	$9.6	$10.0	$0.4
	TOTAL	$4,732.7	$5,090.5	$5,083.6	-$218.7	$4,864.9	$5,026.6	$161.7
Underground Injection Control Program								
Salaries & Expenses		$4,579.4	$5,804.2	$5,460.9	-$234.7	$5,226.2	$5,521.3	$295.1
	TOTAL	$4,579.4	$5,804.2	$5,460.9	-$234.7	$5,226.2	$5,521.3	$295.1
TOTAL:								
Salaries & Expenses		$9,306.1	$10,894.7	$10,534.5	-$453.0	$10,081.5	$10,537.9	$456.4
Abatement Control and Compliance		$6.0		$10.0	-$0.4	$9.6	$10.0	$0.4
Drinking Water Management	TOTAL	$9,312.1	$10,894.7	$10,544.5	-$453.4	$10,091.1	$10,547.9	$456.8
PERMANENT WORKYEARS								
Public Water Systems Supervision Program Assistance		118.8	121.1	121.6		121.6	121.6	
Underground Injection Control Program		119.0	143.5	141.1		141.1	141.1	
TOTAL PERMANENT WORKYEARS		237.8	264.6	262.7		262.7	262.7	

DRINKING WATER

Drinking Water Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
TOTAL WORKYEARS							
Public Water Systems Supervision Program Assistance	130.5	132.4	132.4		132.4	132.4	
Underground Injection Control Program	131.3	154.0	153.9		153.9	153.9	
TOTAL WORKYEARS	261.8	286.4	286.3		286.3	286.3	

DRINKING WATER

Drinking Water Management

Budget Request

The Agency requests a total of $10,547,900 supported by 286.3 total workyears for 1987, an increase of $456,800 and no change in total workyears from 1986. Of the request, $10,537,900 will be for the Salaries and Expenses appropriation and $10,000 will be for the Abatement, Control and Compliance appropriation, an increase of $456,400 and $400, respectively.

Program Description

Two major Regional programs comprise this subactivity.

Public Water Systems Supervision Program Assistance -- This program consists of Regional activities related to national implementation of drinking water regulations to ensure that public water supplies are free of contamination which may pose adverse health effects. The Regional offices provide oversight and support to primacy States in administering Public Water Systems Supervision (PWS) programs and implement programs in those States which do not have primacy and on Indian lands where States do not have civil jurisdiction. The Regions assist States where specific problems are identified, evaluate State programs, and award the PWS grants. The Regions continue to respond to contamination incidents including those (involving unregulated contaminants) which may potentially affect public water supplies.

Underground Injection Control Program -- This program consists of Regional activities related to the protection of underground water sources. The Regions are responsible for ensuring implementation of the Underground Injection Control (UIC) Regulations, either through oversight and assistance to primacy States or Federal implementation in non-primacy States and on Indian lands. They are also responsible for review of sole source aquifer designation petitions. Grant awards for the UIC program are administered by the Regions.

PUBLIC WATER SYSTEMS SUPERVISION PROGRAM ASSISTANCE

1987 Program Request

The Agency requests a total of $5,026,600 supported by 132.4 total workyears, of which $5,016,600 will be for the Salaries and Expenses appropriation and $10,000 will be for the Abatement Control and Compliance appropriation. This represents an increase of $161,300 and $400, respectively, with no change in total workyears. The increase in Salaries and Expenses is for increased operating costs. The increase in Abatement, Control and Compliance is for data management activities.

The Regions will work with the States in implementing regulations for volatile organic contaminants (VOCs), redirecting program efforts in order to adopt any necessary statutory or regulatory revisions to apply and enforce provisions at least as stringent as the Federal requirements. By early 1988, public water supplies will have to comply with VOC Maximum Contaminant Levels (MCLs). Monitoring and Reporting (M/R) requirements, including monitoring for approximately 50 additional VOCs, will be effective upon promulgation; but States may phase in the measurement requirements overtime, with the smallest systems allowed four years to perform the minimum analytic requirements. The Regions will be available to help States with new analytic techniques and meeting additional laboratory certification requirements. The Regions will also have to review the State programs to ensure their adequacy under primacy criteria.

The new monitoring activities will generate a number of cases of contamination. In a limited number of instances, EPA will assist States, localities, and systems in confirming concentration levels, advising on reliable sampling/analytic procedures and the potential for adverse health effects, investigating the pathways of contamination, and suggesting remedial measures including appropriate treatment technology.

Compliance with existing regulatory requirements will remain a primary measure of environmental effectiveness and thus a chief focus for the PWS Supervision program. While elimination of violations with the microbiology, turbidity and total trihalomethanes standard will continue as a high priority, compliance with the chemical and radiological standards will receive new emphasis. In addition, Regions will track the progress of those systems identified as having significant non-compliance. Regional staff will prepare the necessary technical documentation to assure timely and appropriate Federal enforcement actions are initiated against violations of the Interim primary regulations.

Regions may conduct site visits to laboratories previously certified to spot check for the quality and accuracy of sample analyses, perform mid-year evaluations, and review and verify report data.

1986 Program

In 1986 the Agency is allocating a total of $4,864,900 supported by 132.4 total workyears for this program, of which $4,855,300 is from the Salaries and Expenses appropriation and $9,600 is from the Abatement, Control and Compliance appropriation.

Fifty-four States have assumed primary enforcement authority for the PWS supervision program to assure compliance with Interim Primary Regulations. EPA Regions are working with these primacy States to achieve full compliance, particularly for microbiological and turbidity MCLs and monitoring, so that, overall, the number of community PWSs in persistent non-compliance with MCLs will amount to less than 1% of the national inventory. EPA's goal is to eliminate all such persistent non-compliance by 1988.

EPA is directly implementing the program in three non-primacy States and on Indian lands. In anticipation of implementing the VOC regulations, Regions are engaged in assuring a sufficient laboratory capacity for VOC analyses and working with utilities on analytic and reporting requirements. EPA is intensifying negotiations with Indiana in an effort to delegate the program by 1987. Although Pennsylvania and Oregon will have primacy in 1986, EPA continues to provide transition support in such areas as data management, compliance, follow-up, completion of formal enforcement actions, staff training, and other appropriate activities.

The Regions continue to provide assistance to States and utilities as they respond to contamination of water supplies, such as occurrence of ethylene dibromide (EDB). Other assistance involves the investigation and control of agents causing disease outbreaks including the continuing incidence of gastroenteritis and giardiasis.

1985 Accomplishments

In 1985, the Agency obligated a total of $4,732,700 supported by 130.5 total workyears for this program, of which $4,726,700 was from the Salaries and Expenses appropriation and $6,000 was from the Abatement, Control and Compliance Appropriation.

The Regions responded to 325 separate instances of reported contamination, either of supplies themselves or potential threats to sources. Serious contamination incidents, involving substantial regional staff time, occurred in every Region.

Among those were 10 investigations of disease outbreaks. Technical assistance varied in extent from simple responses to telephone inquiries to extensive studies of contamination sites including liaison with Superfund actions.

With the delegation to Pennsylvania, 53 State programs are now directly responsible for more than 96% of the Nation's community water systems. Encouragement from the Regional programs (through direct contact and through the negotiation of State grant agreements and program evaluation) has led to a more aggressive State effort to bring systems into compliance with basic public health standards.

UNDERGROUND INJECTION CONTROL PROGRAM

1987 Program Request

The Agency requests a total of $5.521,300 supported by 153.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, with no change in total workyears. This represents an increase of $295,100 for increased operating costs.

EPA is expected to be responsible for program implementation in 20 States and Indian lands during 1987. In four of those States, EPA will be responsible for regulating only certain categories of wells, with the State having assumed primacy for the remaining categories. Since establishing the last of these direct implementation (DI) programs in late 1984. EPA Regions have made their first priority to meet a primary statutory requirement: that no underground injection may take place without an official permit or other means of approval, which implements proper controls and requires periodic monitoring so that the threat of contamination to underground sources of drinking water is prevented. While the permitting process proceeds on a 5-year schedule, the Regions will ensure that the growing number of Federally-permitted wells operate in conformance with permit requirements. This will include conducting inspections. witnessing and reviewing mechanical integrity tests, and conducting record reviews for enhanced recovery wells to identify compliance problems requiring corrective action. Regions will follow up on confirmed or suspected violations to the extent possible by making on-site visits, meeting with violators, and developing compliance schedules. As necessary, they will develop preliminary technical rationales to support more formal enforcement action.

At the same time, the Regions must maintain oversight and provide technical assistance to 41 State programs, which are regulating the preponderance of injection facilities. Matching the priority given to compliance when EPA has direct responsibility, Regions will actively encourage States to assure compliance through inspections, record reviews, and timely mechanical integrity testing and to solve any emerging compliance problems through a combination of technical assistance and enforcement action. Part of this Regional help will be the application of hydrogeological expertise.

1986 Program

In 1986, the Agency is allocating a total of $5,226,200 supported by 153.9 total workyears for this program, all of which is from the Salaries and Expenses appropriation.

The UIC implementation strategy for permit determinations, where EPA has direct implementation responsibility, is to review all new Class II applications first in accordance with the statutory mandate not to impede oil and gas production. The second priority, existing Class I wells, reflects the Agency's concern about the disposal of hazardous wastes through underground injection. Because of the potential contamination from mining operations, Regions are reviewing existing Class III wells, followed by new Class I and III wells to ensure that construction activities are not hampered. Regions review existing Class II wells as a lower priority because of the 5-year period provided by the regulations. An expanded permitting effort enables the Regions to complete determinations on all existing Class I and III applications, 20% of existing Class II applications, and new Class I, II, and III applications in 1986. The Regions are also completing the assessment of Class V (miscellaneous) wells in non-primacy jurisdictions, maintaining a current inventory of all injection wells, witnessing mechanical integrity tests for some categories of wells, reviewing monitoring reports, maintaining an accurate and current data base, and conducting surveillance activities to ensure compliance.

The Regions oversee and provide technical assistance to 38 States with primacy at the beginning of 1986, operating 33 full and 5 partial programs. Oversight activities include evaluating State implementation programs, working with the States to identify and address compliance problems, negotiating annual program outputs to meet annual operating objectives, and verifying data to ensure accuracy of information used to report environmental results.

Regions continue to process petitions to designate sole source aquifers and continue to evaluate proposed Federally funded projects in designated sole source aquifer areas to determine if any contamination potential exists and, based upon the determination, make appropriate recommendations to the Administrator. In addition, they provide hydrogeological assistance on groundwater contamination incidents and emergency response, conduct grants and financial management activities, provide training, and coordinate UIC activities with other related programs.

1985 Accomplishments

In 1985 the Agency obligated a total of $4,579,400 supported by 131.3 total workyears for the program, all of which was from the Salaries and Expenses appropriation.

In December 1984 EPA promulgated regulations establishing UIC programs for the last group of States and for most Indian lands without State primacy. The Regions continued to process State primacy applications and negotiated with States on program plans and implementation activities, delegating full programs in 2 States and partial programs in 3 States during 1985. For those States with primacy, the Regional Offices reviewed compliance and monitoring reports and provided guidance and assistance on mechanical integrity testing and technical program requirements. They reviewed the States' annual report data and processed the information for compilation into the annual report of program accomplishments. They were responsible for managing the State grant program, which included reviewing program plans, negotiating changes, awarding grants, and auditing grants.

In the jurisdictions where EPA was implementing programs, the first priority was the discovery and closure of Class IV wells (injecting hazardous wastes into or above a drinking water source) within 6 months. Other activities involved notification of facility operators of UIC permits and the first issuance of permits. By the end of the fiscal year, EPA had issued 42 permits for existing Class I and III wells, 5 for new Class I and III's and 313 for new Class II oil and gas wells and 64 for existing Class II's. The Regions also reviewed 3,302 Class II well record files and witnessed 3,068 mechanical integrity tests. To date EPA designated 21 sole source aquifers, with 12 more petitions under review.

DRINKING WATER

Ground-Water Protection

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Ground-Water Protection								
Salaries & Expenses		$1,349.4	$1,388.6	$1,404.3	-$60.4	$1,343.9	$1,398.3	$54.4
Abatement Control and Compliance		$969.3	$1,000.0	$1,000.0	-$43.0	$957.0	$900.0	-$57.0
	TOTAL	$2,318.7	$2,388.6	$2,404.3	-$103.4	$2,300.9	$2,298.3	-$2.6
TOTAL:								
Salaries & Expenses		$1,349.4	$1,388.6	$1,404.3	-$60.4	$1,343.9	$1,398.3	$54.4
Abatement Control and Compliance		$969.3	$1,000.0	$1,000.0	-$43.0	$957.0	$900.0	-$57.0
Ground-Water Protection	TOTAL	$2,318.7	$2,388.6	$2,404.3	-$103.4	$2,300.9	$2,298.3	-$2.6
PERMANENT WORKYEARS								
Ground-Water Protection		23.7	28.0	27.3		27.3	27.3	
TOTAL PERMANENT WORKYEARS		23.7	28.0	27.3		27.3	27.3	
TOTAL WORKYEARS								
Ground-Water Protection		26.4	28.0	28.0		28.0	28.0	
TOTAL WORKYEARS		26.4	28.0	28.0		28.0	28.0	

DRINKING WATER

Ground-Water Protection

Budget Request

The Agency requests a total of $2,298,300 supported by 28.0 total workyears for 1987, a decrease of $2,600 and no change in total workyears. Of the request, $1,398,300 will be for the Salaries and Expenses appropriation and $900,000 will be for the Abatement, Control and Compliance appropriation, an increase of $54,400 and a decrease of $57,000, respectively.

Program Description

Ground-Water Protection -- The ground-water protection program focuses actions under current authorities to protect the Nation's ground water. The program's major objectives include: building and enhancing institutions at the State level; coordinating ground-water protection activities across EPA programs; providing assistance in addressing problems that arise from sources of ground-water contamination that are of national concern; and implementing guidelines for EPA decisions affecting ground-water protection and cleanup. Both Headquarters and Regional staffs are supported by this program.

GROUND-WATER PROTECTION

1987 Program Request

The Agency requests a total of $2,298,300 supported by 28.0 total workyears for this program, of which $1,398,300 will be for the Salaries and Expenses appropriation and $900,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $54,400 and a decrease of $57,000, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of the government wide deficit reductions. The decrease in Abatement, Control and Compliance reflects the completion of some public information activities.

EPA and the Regions working with States will continue to implement the Ground-Water Protection Strategy. Headquarters and Regions will jointly conduct State program development workshops to exchange information among States and to identify common technical and management problems and experiences.

The Agency will implement the ground-water monitoring strategy, which will provide decision makers (at the EPA, State, and site manager levels) the data necessary to make decisions relating to ground water. One major aspect of that effort will be to use existing data systems to design a ground-water information program with capacity to store, shape, and analyze ground-water quality data collected by EPA States and private industry and other ground-water systems. Workshops will be held with the States in cooperation with United States Geological Survey (USGS) to assist States in developing their own ground-water data management systems. Technical Information Publications (TIPs) will be developed for local managers that describe successful practices for dealing with selected activities affecting ground-water quality.

During 1987, the Agency will incorporate ground-water classification guidelines, as appropriate, into the policies, regulations, and procedures administered in several Agency programs dealing with ground water. Headquarters and Regions will work with the States to implement the Pesticides in Ground Water Strategy.

Headquarters and the Regions will manage internal coordinating committees to assure that major ground-water policy questions are addressed. External coordinating committees will be managed to ensure involvement of key groups such as State and local governments and other Federal agencies. Memoranda of Understanding between EPA and the U.S. Geological Survey and EPA and the Bureau of Reclamation will be implemented. EPA will coordinate the implementation of the recommendations made by a Science Advisory Board committee review of EPA ground-water research. The Agency will continue a public information program to inform the public on EPA protection activities.

1986 Program

In 1986, the Agency is allocating a total of $2,300,900 supported by 28.0 total workyears to this program, of which $1,343,900 is for the Salaries and Expenses appropriation and $957,000 is for the Abatement, Control and Compliance appropriation.

Through the Regions, Headquarters is supporting State strategy development with EPA grant funds. Headquarters and Regions are conducting workshops with the States focusing on elements of successful State ground-water programs and how they might be incorporated into State programs, the ground-water monitoring and data management systems, and greater coordination and support from other Federal agencies. All of these efforts are oriented toward helping each State complete a comprehensive State ground-water strategy and toward developing State programs.

A liaison group of a dozen national organizations representing State and local governments is meeting to exchange information and ideas on intergovernmental ground-water protection efforts. This group is assisting EPA in helping States improve their programs and work toward agreed-upon approaches to ground-water protection. Under an EPA grant, a university consortium is holding several ground-water symposia to provide a forum for analysis and examination of public policy issues of importance to State and local officials. In addition to offering an opportunity for examination of issues, the symposia will result in a publication on public policy choices and their implications for State and local officials responsible for ground-water quality management. Selected provisions of the Ground-Water Monitoring Strategy are being implemented in 1986. These initial efforts will focus on ground-water information collection efforts in EPA and other agencies to provide greater access to existing information and to yield a better understanding of ground-water contamination sources. This effort utilizes existing data systems.

Headquarters is working with States, Regions, and public representatives to develop TIPs on various control/cleanup technologies, including a publication on how to reduce ground-water pollution from septic systems. Headquarters and the Regions are working with the Office of Pesticides and Toxic Substances to implement selected provisions of the Pesticides in Ground-Water Strategy.

In cooperation with States and USGS, various EPA offices are undertaking studies and surveys of special ground-water concerns, e.g., a survey of surface impoundments, landfills and municipal lagoons to identify the extent of real and potential contamination from these sources as required under the Resource Conservation Recovery Act (RCRA) reauthorization. The ground-water program is working to support these efforts.

In 1986 the Ground-Water Guidelines are being incorporated into several EPA programs and workshops will be held with the Regions and the States to provide technical and management assistance. The Agency is continuing to improve coordination of ground-water protection activities among EPA programs. Headquarters and the Regions will manage internal and external coordinating committees established in 1985 to ensure that major policy questions are addressed and to ensure appropriate involvement of key constituency groups.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,318,700 supported by 26.4 total workyears, of which $1,349,400 was from the Salaries and Expenses appropriation and $969,300 was from the Abatement, Control and Compliance appropriation

In 1985, EPA awarded Section 106 grants to States in part to initiate comprehensive strategies or develop State ground-water programs. The first compendium of descriptions of State ground-water programs was developed and distributed to the States. A liaison group of a dozen State and local organizations was formed to exchange information on intergovernmental ground-water protection efforts. Under an EPA grant, a university consortium held ground-water symposia on State and local ground-water issues.

A draft ground-water monitoring strategy was developed to help in coordinating ground-water information collection in EPA and other Agencies. A Pesticides in Ground Water Strategy was initiated with the Office of Pesticide Programs to address pesticide contamination of ground water and a TSCA Ground-Water Strategy was developed with the Toxics program to incorporate ground-water criteria into risk assessments of new and existing chemicals to determine if actions are needed to prevent or reduce ground-water contamination from these substances. EPA started development of the ground-water classification guidelines that define ground water according to use and vulnerability. Memoranda of Understanding were developed with USGS to clarify the roles of EPA and USGS for ground-water protection, and with the Bureau of Reclamation for coordination of the High Plains Aquifer Demonstration Program.

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DRINKING WATER

Drinking Water Enforcement

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Drinking Water Enforcement								
Salaries & Expenses		$1,120.7	$1,388.5	$1,251.9	-$53.8	$1,198.1	$1,248.3	$50.2
	TOTAL	$1,120.7	$1,388.5	$1,251.9	-$53.8	$1,198.1	$1,248.3	$50.2
TOTAL:								
Salaries & Expenses		$1,120.7	$1,388.5	$1,251.9	-$53.8	$1,198.1	$1,248.3	$50.2
Drinking Water Enforcement	TOTAL	$1,120.7	$1,388.5	$1,251.9	-$53.8	$1,198.1	$1,248.3	$50.2
PERMANENT WORKYEARS								
Drinking Water Enforcement		29.4	30.3	32.0		32.0	32.0	
TOTAL PERMANENT WORKYEARS		29.4	30.3	32.0		32.0	32.0	
TOTAL WORKYEARS								
Drinking Water Enforcement		32.5	33.7	33.7		33.7	33.7	
TOTAL WORKYEARS		32.5	33.7	33.7		33.7	33.7	

DRINKING WATER

Drinking Water Enforcement

Budget Request

The Agency requests a total of $1,248,300 supported by 33.7 total workyears for 1987, an increase of $50,200 and no change in total workyears from 1986. All of the request will be for the Salaries and Expenses appropriation.

Program Description

Drinking Water Enforcement -- The program serves to ensure national compliance by public water systems (PWS) and underground injection control (UIC) operators with the requirements of the Safe Drinking Water Act (SDWA) in both primacy and non-primacy States as well as Indian lands. The program covers compliance strategy development, national policy and guidance development, technical support for judicial enforcement actions, and administrative aspects of the UIC permit determination process. In the PWS Regional enforcement program, technical support is provided in legal actions against violators of the Primary Drinking Water Regulations in non-primacy State jurisdictions. In addition, the Regions, with State involvement, prepare documentation for enforcement actions relating to recalcitrant violators in primacy States. The PWS enforcement activity also encompasses review of State primacy programs for compliance with newly promulgated regulations.

The Regional UIC enforcement program ensures compliance with the underground injection control regulations primarily in non-primacy States and on Indian lands. Enforcement actions are initiated against recalcitrant violators in primacy States when appropriate. The UIC enforcement program is also responsible for the administrative aspects of the UIC permit issuance as well as the review of primacy applications.

DRINKING WATER ENFORCEMENT

1987 Program Request

The Agency requests a total of $1,248,300 supported by 33.7 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $50,200 and no change in total workyears. The increase reflects adjustments to the 1986 base as part of the government-wide deficit reductions.

Regional PWS enforcement activities involve enforcing the drinking water standards in non-primacy States and on Indian lands for which EPA has direct implementation responsibilities. Regions will also pursue selective enforcement actions in primacy States which are unwilling or unable to take direct action against violators. In the past, for a variety of reasons, many States have not actively pursued enforcement against violators of the SDWA. Selected EPA enforcement actions will reinforce EPA's intention to enforce the SDWA. Notices of violation and formal enforcement actions will be developed for Department of Justice (DOJ) referral against violators of the microbiological and chemical maximum contaminant levels. Case documentation will be prepared in coordination with the Regional Counsels' offices to assure appropriate and accurate documentation. Continued support will be provided to address the prior year civil referrals already at DOJ.

Permitting is the cornerstone of the UIC regulatory program: it provides the means to protect underground sources of drinking water most efficiently by taking into account site specific circumstances while managing the controlled disposal of hazardous wastes and other substances. Consulting UIC technical personnel, the Regional enforcement staff will process the permit applications and perform the administrative activities such as setting up pre-application conferences, public hearings and review of public comments associated with permit issuance. The technical review of permit applications is provided under the Regional UIC program. Priorities for issuing UIC permits are consistent with those identified for the technical program. The Regional enforcement staff will issue permit determinations on 624 applications.

Monitoring of compliance with UIC permit conditions will gradually increase. The phase-in of permitting and other program responsibilities, coupled with the expanded field presence in the EPA administered UIC program, will generate a growing enforcement workload. There will be a certain number of permit denials, eliciting appeals and closures of on-going operations where necessary. Failures by operators to apply, test, or report will all require action to obtain compliance. The Regions will selectively prepare litigation reports and affidavits, conduct on-site investigations, and review files and records in preparation for court referrals, provide court testimony, follow-up on court orders, assist courts in penalty determinations, and track consent decrees.

At the national level, continued oversight and monitoring of enforcement action in both the PWS and UIC programs will be coordinated with the Office of Enforcement and Compliance Monitoring (OECM). The PWS Compliance Strategy will undergo substantial revision to reflect the added responsibilities for compliance with new contaminant standards and treatment technology requirements. Focus on compliance with chemical and radiation standards will require reassessment of enforcement priorities which currently emphasize microbiological compliance. Emerging UIC enforcement cases will be reviewed to ensure national consistency on interpreting regulatory requirements and to determine areas where additional guidance is necessary.

1986 Program

In 1986, the Agency is allocating a total of $1,198,100 supported by 33.7 total workyears for the program, all of which is from the Salaries and Expenses appropriation.

At the Headquarters level, procedures for processing UIC permit appeals will be developed as well as guidance on loss of authorization and other issues identified as implementation of the UIC regulatory programs proceed.

Regional PWS enforcement activities continue to focus on compliance and enforcement against persistent and recalcitrant violators in non-primacy States and Indian lands while continuing to support referrals at DOJ from prior years. As part of this effort compliance targets and schedules are being negotiated with systems in violation of MCLs and technical support in preparing case documentation and testimony is being provided. Enforcement actions against recalcitrant violators in primacy States are being initiated with State input, as part of the Agency's compliance and enforcement policies.

While UIC permit issuance continues to be a high priority, the Regions are beginning to act against owners/operators in violation of the UIC regulations. Currently, this activity concentrates on violations in non-primacy States and Indian lands. The Regions are reviewing compliance reports, inspection data, and mechanical integrity test (MIT) information to determine when enforcement actions should be initiated. They are issuing letters of violation to any Class II or V injection well for failure to submit inventory information and a timely permit application and for failure to comply with a request for information.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,120,700 supported by 32.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation.

To improve compliance among small systems with the microbiological and turbidity MCLs, the enforcement and technical staffs worked together in negotiating compliance targets and schedules with systems in violation of MCLs. They provided support for the 21 civil actions referred to the Office of Enforcement and Compliance Monitoring by developing supporting documentation and providing expert testimony.

Regional UIC enforcement activities continued to focus on the administrative aspects of permit issuance in non-primacy jurisdictions, including Indian lands. They conducted administrative reviews of permit applications, worked with the program staff in the review of the technical aspects of the permit, conducted public hearings as necessary, issued the final permit, and in a few instances processed permit appeals.

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HAZARDOUS WASTE

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$52,544.7	$61,435.7	$63,315.7	-$2,722.3	$60,593.4	$66,175.2	$5,581.8
Abatement Control and Compliance	$109,860.5	$140,292.0	$145,342.0	-$6,249.5	$139,092.5	$153,692.0	$14,599.5
Research & Development	$31,670.4	$35,626.1	$39,886.7	-$1,715.0	$38,171.7	$36,369.0	-$1,802.7
TOTAL, Hazardous Waste	$194,075.6	$237,353.8	$248,544.4	-$10,686.8	$237,857.6	$256,236.2	$18,378.6
PERMANENT WORKYEARS	1,045.2	1,217.9	1,284.5		1,284.5	1,301.3	16.8
TOTAL WORKYEARS	1,176.2	1,367.9	1,442.5		1,442.5	1,462.3	19.8
OUTLAYS	$150,793.3	$197,408.7	$214,677.5	-$5,595.5	$209,082.0	$239,991.5	$30,909.5
AUTHORIZATION LEVELS	The Hazardous and Solid Waste Amendments of 1984 reauthorized this program at a level of $232,246.0 for 1985, $252,408.3 for 1986 and $248,529.0 for 1987.						

HAZARDOUS WASTE

OVERVIEW AND STRATEGY

The Resource Conservation and Recovery Act (RCRA), as revised by the Hazardous and Solid Waste Amendments (HSWA) of 1984, provides the legislative mandate for a nationwide program to manage hazardous wastes from generation through disposal. Much remains to be accomplished in protecting human health and the environment from current hazardous waste management practices. Numerous wastes are not adequately regulated, and many facilities are not in compliance with regulatory standards. In addition, many facilities have solid waste management units that were previously unregulated but which now must be addressed to protect the human health and the environment. Some States lack the legal authority, technical skills, or resources to take timely and appropriate enforcement action. To address these problems, the Agency has developed a strategy which encompasses five major objectives. These are to (1) implement strong State programs; (2) improve permitting performance; (3) strengthen compliance monitoring and enforcement; (4) develop new and review existing regulations; and (5) conduct research and development to support regulatory programs. The 1987 request for hazardous waste includes sufficient resources to carry out these objectives.

Implement Strong State Programs

The effective management of hazardous wastes is dependent on a strong Federal/State partnership. The Agency will continue to help States assume full authorization by providing direct program assistance, training, guidance, and financial support. In addition, the Agency will assist the States in upgrading their program capabilities to meet new and modified Federal standards. The Agency and the States will continue to operate within the Interim National Criteria. These criteria define the key factors and performance expectations for managing and evaluating the RCRA program.

States will continue to develop schedules for revisions which incorporate the 1984 Amendments. The Agency and the States will jointly examine existing State statutory and regulatory authorities to determine what amendments are needed. The schedule for incorporating the 1984 Amendments and for achieving the subsequent authorization will be developed. The Agency will provide grant bonuses as incentives to States that more rapidly become authorized for HSWA provisions.

Improve Permitting Performance

A major objective of the permit program is to permit all operating land disposal facilities by 1988 and all incineration facilities by the end of 1989, both of which are statutory deadlines.

Permitting activities are significantly affected by the 1984 Amendments, resulting in a more extensive permit processing program. Permits issued after November 8, 1984 must incorporate 1984 Amendment provisions (e.g., double liners, corrective action for prior releases, and exposure assessments) when applicable. Submission and review of information related to the 1984 Amendments will add time to the permitting process. Not only will the length of the permit process be extended, but the additional requirements also entail more extensive effort on each permit, particularly regarding corrective action of releases from solid waste management units. HSWA has also caused a significant number of land disposal facilities to close, generating an increasing closure plan review workload in the Regions and States.

The Agency and the States will jointly process and issue permits. Authorized States will issue the portions of a RCRA permit that include pre-HSWA program requirements and any HSWA provisions for which they are authorized. The Agency will be responsible for preparing those portions of the permit that include HSWA provisions for which a State is not authorized. Implementation of facility management planning will be a priority in 1987. A strategy to bring each major facility into compliance with all applicable requirements will be developed through planning and coordination between Regions and States.

Strengthen Compliance Monitoring And Enforcement

The program will continue to emphasize compliance at land disposal facilities. The 1984 Amendments required interim status land disposal facilities to certify the compliance of their units with ground water monitoring and financial responsibility requirements and submit a permit application by November 1985. Facilities which did not meet these requirements lost interim status for those units and are required to close them. Many facilities did not retain interim status. Inspections and appropriate enforcement actions will be made at these facilities as well as at facilities that continue to operate.

Corrective action measures are another major component of the program. Corrective action authorities provided under HSWA will be employed at facilities to investigate and remediate releases and off boundary contamination that may threaten human health and the environment. Extensive use of these authorities will be used at facilities where releases have been identified or are suspected.

The 1984 Amendments mandate the annual inspection of Federal, State, and local government owned or operated facilities. Annual inspections at all land disposal facilities will also be made. Incineration and storage/treatment facilities will be inspected at least once every two years.

The RCRA enforcement program will initiate appropriate administrative, civil, and criminal enforcement actions when violations of hazardous waste management requirements are discovered. The program will continue to emphasize timely and appropriate enforcement action for non-compliance, especially those that pertain to ground water and inadequate permit applications. The implementation of the RCRA Ground Water Monitoring Technical Enforcement Guidance and the Enforcement Response and Civil Penalty Policies will ultimately lead to significant improvements in the rate of compliance with the RCRA program.

Under the 1984 Amendments, the number of handlers subject to the RCRA regulations has greatly expanded, due to the regulation of small quantity generators and underground storage tanks. Outreach and compliance activities especially designed for these handlers, many of whom are small businesses, will be undertaken.

Develop New and Revise Existing Regulations

The most challenging provisions of the 1984 Amendments are those that ban or restrict the disposal of hazardous waste on land. The 1984 Amendments promote a shift toward recycling, reducing wastes generated, and using more sophisticated treatment and destruction techniques. The Agency will restrict the land disposal of certain hazardous wastes to protect ground water and air.

The major issues facing the hazardous waste management program will be addressed by a coordinated Agency effort to move towards greater reliance upon risk-based decisions. These issues include corrective action policies, a comprehensive listing and delisting strategy, and the development of risk-based site specific decisions regarding petitions to land disposal restrictions.

The 1984 Amendments greatly increase the scope of activities to be regulated under the hazardous waste management program. The Agency will continue to close gaps in the regulatory framework by conducting public education programs for the expanded regulated community of over 100,000 small quantity generators, continue to bring additional wastes under regulation, and provide expanded closure and post closure regulations as well as regulations for corrective action where needed. In support of efforts to protect ground water, the Agency will revise Appendix VIII ground water monitoring provisions and alternate concentration levels.

Of great significance is the fact that the 1984 Amendments apply to the underground storage of products as well as wastes. A regulatory strategy will be developed for over a million underground storage tanks which contain petroleum products and hazardous substances. Over the short term, the Agency will develop guidance, conduct economic analyses, and establish a notification and compliance program. Over the longer term, the Agency will issue regulations providing standards for new tanks, develop methods for leak detection and corrective actions for releases, and design effective enforcement strategies.

Other major activities include developing regulations for controlling toxic air emissions at hazardous waste treatment, storage, and disposal facilities; determining whether deep well injection of hazardous wastes is sufficiently protective of human health and the environment; developing criteria for reviewing requests for exemption from requirements to retrofit surface impoundments; developing regulations for hazardous waste burned as fuel and for managing used oil; and studying Section 8002 large volume wastes.

The 1984 Amendments include minimum technology requirements which establish major changes in the way hazardous waste is disposed. Land disposal regulations will reflect requirements to install double liner and leachate collection and removal systems as well as to ban the placement of bulk liquid hazardous waste into landfill facilities. Similarly, the Agency will examine the nature and extent of the hazardous waste problem at Subtitle D facilities and revise existing criteria, if appropriate.

Conduct Research And Development To Support Regulatory Program

The 1987 research and development program will develop scientific and technical information to support regulatory initiatives. Major thrusts include development of generic analytical methods to identify hazardous wastes and standardization of subsurface monitoring methods for more reliable groundwater monitoring. Alternatives to conventional means of disposing and destroying wastes will continue to be evaluated and additional risk assessments will be performed to support listing and waste banning decisions. Engineering and monitoring studies will support development of methods to improve the installation, design, and monitoring of underground storage tanks.

Outputs Reflect Shifting Workload

The estimated outputs for the hazardous waste program in 1986 and 1987 reflect increases in enforcement activities, with much of this due to the emphasis on compliance and corrective action at land disposal facilities. The decreases for regulatory activities reflect completion of some efforts and a shift toward implementation guidance work. Also, several of the remaining regulatory efforts in 1987 are the most complex and resource intensive, such as land banning and underground storage tanks. The implementation outputs show a decrease in the number of states receiving full authorization for pre-HSWA due to all participating States being authorized in 1986. Additionally, the permitting final determinations are decreasing to reflect the large number of facilities that are no longer seeking operating permits and had closure plans approved in 1986.

HAZARDOUS WASTE

PROGRAM ACTIVITIES	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
Regulations and Guidance					
RCRA Standards:	11	20	38	28	-10
Proposals.............	9	12	21	11	-10
Promulgations.........	2	8	17	17	---
Section 3001 Listings:	11	17	23	18	-5
Proposals.............	9	8	12	6	-6
Promulgations.........	2	9	11	12	+1
Implementation Guidances..............	20	31	29	38	+9
Reports to Congress....	2	2	6	4	-2
Implementation					
State Authorization:					
Full.................	22	17	25	0	-25
Full (Cumulative)....	26	52	51	51	0
Permit Call-Ins*.......	679	---	150	800	+650
(Cumulative)*...	4,067	3,942	4,349	5,149	+800
Final Determinations*..	298	502	922	830	-92
(Cumulative)*...	1,585	1,438	2,507	3,337	+830
Enforcement Actions*					
Inspections...........	16,098	11,834	10,125	10,480	+355
Administrative Orders..	1,624	3,022	2,690	2,742	+52
Civil Litigation.......	149	215	257	286	+29
Criminal Litigation....	82	35	83	83	0
Corrective Action Preliminary Investigations.........	---	---	683	886	+203

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* Includes both EPA and States.

NOTE: All outputs are incremental except as indicated.

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HAZARDOUS WASTE

Hazardous Waste Research

PROGRAM	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Scientific Assessment - Hazardous Waste							
Salaries & Expenses	$1,107.8	$1,199.9	$1,199.9	-$51.5	$1,148.4	$1,331.5	$183.1
Research & Development	$2,189.2	$1,633.8	$2,731.8	-$117.5	$2,614.3	$3,062.0	$447.7
TOTAL	$3,297.0	$2,833.7	$3,931.7	-$169.0	$3,762.7	$4,393.5	$630.8
Monitoring Systems & Quality Assurance - Hazardous Waste							
Salaries & Expenses	$4,127.6	$3,826.0	$3,825.6	-$164.5	$3,661.1	$3,635.8	-$25.3
Research & Development	$6,706.0	$11,917.8	$11,705.3	-$503.3	$11,202.0	$11,203.0	$1.0
TOTAL	$10,833.6	$15,743.8	$15,530.9	-$667.8	$14,863.1	$14,838.8	-$24.3
Health Effects - Hazardous Waste							
Salaries & Expenses	$781.3	$849.4	$889.2	-$38.2	$851.0	$652.1	-$198.9
Research & Development	$995.6	$937.3	$1,132.0	-$48.6	$1,083.4	$1,756.0	$672.6
TOTAL	$1,776.9	$1,786.7	$2,021.2	-$86.8	$1,934.4	$2,408.1	$473.7
Environmental Engineering & Technology - Hazardous Waste							
Salaries & Expenses	$5,353.0	$5,227.5	$5,102.1	-$219.4	$4,882.7	$5,429.1	$546.4
Research & Development	$16,100.9	$15,597.9	$15,622.2	-$671.7	$14,950.5	$13,808.0	-$1,142.5
TOTAL	$21,453.9	$20,825.4	$20,724.3	-$891.1	$19,833.2	$19,237.1	$596.1

HAZARDOUS WASTE

Hazardous Waste Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Environmental Processes & Effects - Hazardous Waste							
Salaries & Expenses	$3,513.2	$3,209.9	$3,258.6	-$140.0	$3,118.6	$3,157.5	$38.9
Research & Development	$4,572.9	$5,539.3	$6,195.4	-$266.4	$5,929.0	$6,540.0	$611.0
TOTAL	$8,086.1	$8,749.2	$9,454.0	-$406.4	$9,047.6	$9,697.5	$649.9
Integrated Hazardous Waste Research							
Research & Development	$1,105.8		$2,500.0	-$107.5	$2,392.5		-$2,392.5
TOTAL	$1,105.8		$2,500.0	-$107.5	$2,392.5		-$2,392.5
TOTAL:							
Salaries & Expenses	$14,882.9	$14,312.7	$14,275.4	-$613.6	$13,661.8	$14,206.0	$544.2
Research & Development	$31,670.4	$35,626.1	$39,886.7	-$1,715.0	$38,171.7	$36,369.0	-$1,802.7
Hazardous Waste Research TOTAL	$46,553.3	$49,938.8	$54,162.1	-$2,328.6	$51,833.5	$50,575.0	-$1,258.5
PERMANENT WORKYEARS							
Scientific Assessment - Hazardous Waste	18.6	17.5	18.0		18.0	22.0	4.0
Monitoring Systems & Quality Assurance - Hazardous Waste	35.9	40.5	40.5		40.5	41.5	1.0
Health Effects - Hazardous Waste	6.0	12.0	12.0		12.0	11.0	-1.0

HAZARDOUS WASTE

Hazardous Waste Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986'	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
Environmental Engineering & Technology - Hazardous Waste	85.7	83.4	87.9		87.9	87.9	
Environmental Processes & Effects - Hazardous Waste	50.9	44.4	45.7		45.7	46.7	1.0
TOTAL PERMANENT WORKYEARS	197.1	197.8	204.1		204.1	209.1	5.0
TOTAL WORKYEARS							
Scientific Assessment - Hazardous Waste	23.6	22.5	22.5		22.5	24.5	2.0
Monitoring Systems & Quality Assurance - Hazardous Waste	40.2	47.5	47.5		47.5	48.5	1.0
Health Effects - Hazardous Waste	6.9	12.0	12.0		12.0	12.0	
Environmental Engineering & Technology - Hazardous Waste	101.4	101.2	99.9		99.9	99.9	

HAZARDOUS WASTE

Hazardous Waste Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Environmental Processes & Effects - Hazardous Waste	57.4	58.1	58.1		58.1	58.1	
TOTAL WORKYEARS	229.5	241.3	240.0		240.0	243.0	3.0

HAZARDOUS WASTE

Hazardous Waste Research

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Develop Data to Support the Use of Alternative Technologies

- Manual on Field Applications of Alternative Methods Applicable to High Hazard Wastes (Env. Technology)

Objective 2: Develop and Evaluate Tests and Procedures for Conducting Risk Assessments

- Screening methods for detecting mutagenesis and carcinogenesis in RCRA wastes (Health)

Objective 3: Conduct the Assessment and Control Research Necessary to Address Dioxin

- Report on bioaccumulation of TCDD in large animals from contaminated soils (Env. Processes)

Objective 4: Develop Procedures to Identify and Measure Chemicals in Wastes

- Report on the quality of Subtitle D monitoring data (Monitoring)
- Report on the use of generic GC/MS analytical methods (Monitoring)

Objective 5: Develop Data to Support Implementation of the Land Disposal Regulations

- Expert system for permitting of land disposal facilities (Env. Technology)

Objective 6: Develop Data to Support Implementation of the Incineration Regulations

- Report on the thermal destruction requirements of dioxin-contaminated wastes (Env. Technology)

Objective 7: Provide Quality Assurance Support to the Hazardous Waste Program

- Assessment of Q/A guidance for measuring pollution in ground water (Monitoring)

Objective 8: Develop Procedures to Prevent and Contain Hazardous Releases

- Report on geophysical and geochemical techniques for UST monitoring (Monitoring)
- Report on non-destructive techniques for locating subsurface residuals and chemical containers (Env. Technology)

1986 PLANNED OUTPUTS

Objective 1: Develop Data to Support the Use of Alternative Technologies

- Reports on effectiveness of alternative treatments for banned wastes (Env. Technology)

Objective 2: Develop and Evaluate Tests and Procedures for Conducting Risk Assessments

- Report on in-vivo/in-vitro multidisciplinary screen for evaluating wastes (Health)

Objective 3: Conduct the Assessment and Control Research Necessary to Address Dioxin

- Interim report on field evaluations of the ability of APEG to destroy dioxins in soils (Env. Technology)

Objective 4: Develop Procedures to Identify and Measure Chemicals in Wastes

- Report on the use of borehole geophysics for ground water monitoring (Monitoring)

Objective 5: Develop Data to Support Implementation of the Land Disposal Regulations

- Report on updated design information on clay landfill liners (Env. Technology)

Objective 6: Develop Data to Support Implementation of the Incineration Regulations

- Reports on incinerator and industrial boiler operating parameters to ensure waste destruction (Env. Technology)

Objective 7: Provide Quality Assurance Support to the Hazardous Waste Program

- Report on externalization of the Repository Program (Monitoring)

Objective 8: Develop Procedures to Prevent and Contain Hazardous Wastes

- Report on physical principles and basic monitoring methods for UST (Monitoring)

1985 ACTUAL OUTPUTS

Objective 1: Develop Data to Support the Use of Alternative Technologies

- Report on innovative removal methods for heavy metals (Env. Technology)

Objective 2: Develop and Evaluate Tests and Procedures for Conducting Risk Assessments

- Preparation of 94 Health and Environmental Effects Profiles (Sci. Assessment)
- Standardized system to evaluate ground water pollution potential (Env. Processes)

Objective 3: Conduct the Assessment and Control Research Necessary to Address Dioxin

- Interim Report on Dioxin Emissions from Industrial Boilers (Env. Technology)
- Report on the mobility of 2,3,7,8-TCDD in soils (Env. Processes)

Objective 4: Develop Procedures to Identify and Measure Chemicals in Wastes

- Report on ground water monitoring using optical fibers and optrodes (Monitoring)

Objective 5: Develop Data to Support Implementation of the Land Disposal Regulations

- Report on the status of underground storage of wastes (Env. Technology)

Objective 6: Develop Data to Support Implementation of the Incineration Regulations

- Report on the performance of eight full scale incinerators (Env. Technology)

Objective 7: Provide Quality Assurance Support to the Hazardous Waste Program

- Report on the hazardous waste bank materials (Monitoring)
- Report on development of standard reference materials (Monitoring)

Objective 8: Develop Procedures to Prevent and Contain Hazardous Wastes

- Summary report on remote sensing for hazardous spills (Monitoring)
- Report on the design of hazardous leakage controls (Env. Technology)

HAZARDOUS WASTE

Hazardous Waste Research

Budget Request

The Agency requests a total of $50,575,000 supported by 243.0 total workyears for 1987, a decrease of $1,258,500 and an increase of 3.0 total workyears from 1986. Of the request, $14,206,000 will be for the Salaries and Expenses appropriation and $36,369,000 will be for the Research and Development appropriation, an increase of $544,200 and a decrease of $1,802,700, respectively.

Program Description

The Resource Conservation and Recovery Act (RCRA) authorizes a regulatory program to identify those wastes which pose a substantial hazard to human health or the environment, and management standards sufficient to prevent such harm. Research in this program provides the scientific and engineering basis for characterizing and determining the extent of the problems and for formulating controls.

Objective 1: Develop Data to Support the Use of Alternative Technologies. Research supporting this objective is being used in implementing the portions of RCRA that require the banning of high hazard wastes from land disposal. The effectiveness of treatment alternatives and waste altering processes is being evaluated and performance parameters established.

Objective 2: Develop and Evaluate Tests and Procedures for Conducting Risk Assessments. Research supporting this objective will provide more applicable, less expensive, simpler, and more accurate risk assessment methodologies, as well as actual risk assessments for decision-making.

Objective 3: Conduct the Assessment and Control Research Necessary to Address Dioxin. Research supporting this objective will determine the nature and extent of dioxin contamination in the U.S., evaluate the potential for human and environmental effects, and determine the efficacy and costs of potential control technologies.

Objective 4: Develop Procedures to Identify and Measure Chemicals in Wastes. Research develops and validates the analytical procedures and techniques required to characterize wastes for Sections 3001 and 3013 of RCRA. These are used for listing and other regulatory decisions made by the Office of Solid Waste.

Objective 5: Develop Data to Support Implementation of the Land Disposal Regulations. Research supporting this objective provides support for permitting of land disposal and land treatment facilities, and for improvements in operation and design requirements.

Objective 6: Develop Data to Support Implementation of the Incineration Regulations. Laboratory, pilot and full-scale units are investigated to determine the performance of a range of thermal treatment devices. Results are used by permitting officials to evaluate permit requests and in monitoring for compliance with performance requirements.

Objective 7: Provide Quality Assurance Support to the Hazardous Waste Program. A quality assurance program is being conducted to provide a scientific data base of known quality to support RCRA regulatory activities. The program includes a repository of calibration standards, reference materials and on-site evaluations of contractor laboratories.

Objective 8: Develop Procedures to Prevent and Contain Hazardous Releases. Research supporting this objective addresses requirements established by the Clean Water Act (CWA) and RCRA's Underground Storage Tank (UST) program. Research supporting these programs assesses the most cost-effective technology and scientific techniques available to prevent and control releases of hazardous substances.

SCIENTIFIC ASSESSMENT

1987 Program Request

The Agency requests a total of $4,393,500 supported by 24.5 total workyears for this program, of which $1,331,500 will be for the Salaries and Expenses appropriation and $3,062,000 will be for the Research and Development appropriation. This represents an increase of $183,100 and $447,700, respectively, and an increase of 2.0 total workyears. The increase in Salaries and Expenses reflects enhanced support to the in-house research program. The increase in Research and Development and workyears reflects the need for additional support to OSW in making permitting and land banning decisions.

Develop and Evaluate Tests and Procedures for Conducting Risk Assessments. Additional resources will support preparation of additional Health and Environmental Effects Profiles (HEEPs) and Alternate Concentration Levels (ACLs) needed for listing decisions. In addition, many HEEPs need to be updated to reflect new health data developed since the original HEEPs were prepared. Increased resources will also provide additional support for banning and permitting decisions and for responding to public comments on proposed decisions.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Exposure and risk assessment methods for dioxin and similar compounds will be advanced through use of new scientific information. Specific efforts will include refining exposure methods to account for atmospheric photolysis rates and their effects on soil concentrations and determining soil accumulation on skin and subsequent dermal absorption.

Develop Procedures to Prevent and Contain Hazardous Releases. Chemical-specific risk assessments will continue being developed to support the Underground Storage Tank (UST) program.

1986 Program

In 1986, the Agency is allocating a total of $3,762,700 supported by 22.5 total workyears for this program, of which $1,148,400 is from the Salaries and Expenses appropriation and $2,614,300 is from the Research and Development appropriation. In 1986, the program emphasizes risk assessment studies to support permitting and land banning decisions by OSW.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,297,000 supported by 23.6 total workyears for this program, of which $1,107,800 was from the Salaries and Expenses appropriation and $2,189,200 was from the Research and Development appropriation. During 1985, HEEPs were initiated for approximately 94 chemicals, Acceptable Daily Intake (ADI) verification and development were initiated for approximately 400 chemicals, and the risk analysis for dioxin-contaminated soil was completed and a final report sent to OSW.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Program Request

The Agency requests a total of $14,838,800 supported by 48.5 total workyears for this program, of which $3,635,800 will be for the Salaries and Expenses appropriation and $11,203,000 will be for the Research and Development appropriation. This represents a decrease of $25,300 and an increase of $1,000, respectively, and an increase of 1.0 total workyear. The overall decrease is the result of new emphasis being placed on generic approaches to validating analytical methods, rather than the method-by-method approach emphasized formerly.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Guidelines for trace analysis of additional non-2,3,7,8-TCDD dioxins and dibenzofurans will be developed. Following standardization and validation, these will be published and incorporated into contract laboratories' protocols for analysis of dioxin-contaminated samples.

Develop Procedures to Identify and Measure Chemicals in Wastes. Two new activities will be initiated: standardization of subsurface monitoring methods for more reliable ground water monitoring, and development of generic analytical methods for publication by OSW. Research in previously initiated areas will continue and include validation of existing analytical methods, development of new analytical methods and development and validation of subsurface monitoring methods.

Provide Quality Assurance Support to the Hazardous Waste Program. Quality assurance support to the contract labs program will continue to be provided, as will referee laboratory services. Standard reference materials will be developed for use in the materials repository, and quality control and performance evaluation samples will be distributed to contract laboratories.

Develop Procedures to Prevent and Contain Hazardous Releases. Development of a real-time sensor for gaseous emissions will be initiated. This will detect potential releases such as the one that occurred in Bhopal, India. UST support will encompass evaluation of geophysical sensors and volatile organic emission sensors for detecting leaks of materials such as gasoline and benzene.

1986 Program

In 1986, the Agency is allocating a total of $14,863,100 supported by 47.5 total workyears for this program, of which $3,661,100 is from the Salaries and Expenses appropriation and $11,202,000 is from the Research and Development appropriation. Resources in 1986 are supporting development of new field monitoring methods for use at disposal sites, validation of additional analytical methods and detection and monitoring of leaking underground storage tanks.

1985 Accomplishments

In 1985, the Agency obligated a total of $10,833,600 supported by 40.2 workyears for this program, of which $4,127,600 was from the Salaries and Expenses appropriation and $6,706,000 was from the Research and Development appropriation. During 1985, four analytical methods were validated, ground water monitoring with fiber optics was initially evaluated and extensive quality assurance support was provided.

HEALTH EFFECTS

1987 Program Request

The Agency requests a total of $2,408,100 supported by 12.0 total workyears for this program, of which $652,100 will be for the Salaries and Expenses appropriation and $1,756,000 will be for the Research and Development appropriation. This represents a decrease of $198,900 and an increase of $672,600, respectively, and no change in total workyears. The decrease in Salaries and Expenses and increase in Research and Development reflect the fact that validation of the bioassay screen will be conducted extramurally.

Develop and Evaluate Procedures for Conducting Risk Assessments. Development of the bioassay screening protocol for determining waste toxicity will continue. Additional resources will support accelerated validation of the screen's ability to accurately represent human health endpoints.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Additional resources will support initiation of a program to determine the toxicity of dioxins and similar compounds.

1986 Program

In 1986, the Agency is allocating a total of $1,934,400 supported by 12.0 total workyears for this program, of which $851,000 is from the Salaries and Expenses appropriation and $1,083,400 is from the Research and Development appropriation. In 1986 this activity involves accelerated efforts to validate the bioassay screening protocol.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,776,900 supported by 6.9 workyears for this program, of which $781,300 was from the Salaries and Expenses appropriation and $995,600 was from the Research and Development appropriation. Development of individual biological health effects tests of wastes for four disease endpoints was completed in 1985. These endpoints are general toxicity, genetic toxicity, reproduction toxicity and nervous system toxicity.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $19,237,100 supported by 99.9 total workyears for this program, of which $5,429,100 will be for the Salaries and Expenses appropriation and $13,808,000 will be for the Research and Development appropriation. This represents an increase of $546,400 and a decrease of $1,142,500, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects enhanced support to the in-house research program. The decrease in Research and Development reflects completion of several activities supporting OSW's dioxin, land disposal and incineration programs.

Develop Data to Support the Use of Alternative Technologies. This program will continue evaluating both new and existing alternative treatment processes for wastes likely to be banned from land disposal. Additional resources will accelerate the availability of case study results to support the Agency's land banning program.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Research will continue evaluating the sorption/desorption characteristics of dioxin in contaminated soils. Decreased resources are being sought as a result of completion of initial research efforts and the fact that alternative technology assessments will address many of the technologies initially explored in this program.

Develop Data to Support Implementation of the Land Disposal Regulations. Research in this program will continue addressing the major issues associated with land disposal, including liners and cover performance, leachate collection, emissions and the problems of small generators. Reduced resources are being sought as a result of completion of several research efforts addressing liners and landfill placement.

Develop Data to Support Implementation of the Incineration Regulations. Performance tests will be conducted by incinerating wastes at the Combustion Research Facility to determine the operating conditions necessary for waste destruction. Real-time methods of determining incinerator compliance with permits will be investigated, as will improved sampling techniques for monitoring thermal operations. Reduced resources are being requested as a result of completion of earlier research efforts.

Develop Procedures to Prevent and Contain Hazardous Releases. Additional resources are being requested to support the UST program. Planned activities include evaluations of existing leak detection methods, a guidance manual on the use of non-destructive techniques for locating buried tanks, and a guidance manual on tank release prevention methods. Research supporting the Clean Water Act will produce a manual on procedures for on-site treatment of high-strength wastes, and on evaluation of containment, removal and dispersant technologies for controlling floating spills.

1986 Program

In 1986, the Agency is allocating a total of $19,833,200 supported by 99.9 total workyears for this program, of which $4,882,700 is from the Salaries and Expenses appropriation and $14,950,500 is from the Research and Development appropriation. Activities in 1986 include several studies on landfill liners and covers and new evaluations of leak detection equipment in support of the UST program.

1985 Accomplishments

In 1985, the Agency obligated a total of $21,453,900 supported by 101.4 total workyears for this program, of which $5,353,000 was from the Salaries and Expenses appropriation and $16,100,900 was from the Research and Development appropriation. During 1985, the performance of eight full scale incinerators was evaluated and reported on, as was the use of innovative extraction methods for removing heavy metals from wastes. Dioxin emissions from industrial boilers were reported on, as were various designs for controlling waste lagoon leakage. Major evaluations were conducted regarding control technologies for dioxin-contaminated wastes and soils.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests a total of $9,697,500 supported by 58.1 total workyears for this program, of which $3,157,500 will be for the Salaries and Expenses appropriation and $6,540,000 will be for the Research and Development appropriation. This represents increases of $38,900 and $611,000, respectively. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The increase in Research and Development reflects the need for accelerated model validation research to support the land banning program.

Develop and Evaluate Procedures for Conducting Risk Assessments. Additional resources will accelerate development of multimedia assessment models for predicting potential migration of wastes from land disposal sites into air, soil and ground water, and will allow additional validation of ground water models for predicting the impacts of land disposal. Quantitative structure-activity research will also continue developing a validated method for predicting the toxicity of wastes and leachates.

Conduct the Assessment and Control Research Necessary to Address Dioxin. The transport, fate and degradation of 2,3,7,8 and other isomers will continue being assessed, as will dioxin's bioavailability to fish from contaminated sediments. Comparative plant uptake rates will also be determined.

Develop Data to Support Implementation of the Land Disposal Regulations. Evaluations of the land treatability of wastes and of specific soil processes will continue. A field-scale evaluation of waste treatability will be conducted to assess the utility of land treatment as a disposal option and a users guide for making land treatment decisions will be produced.

Develop Procedures to Prevent and Contain Hazardous Releases. Development of a ground water transport and fate model for predicting concentrations of materials, including gasoline in ground water, will be accelerated with additional resources. A validated bioassessment protocol for determining the bioavailability and toxicity of releases will also be developed.

1986 Program

In 1986, the Agency is allocating a total of $9,047,600 supported by 58.1 total workyears for this program, of which $3,118,600 is from the Salaries and Expenses appropriation and $5,929,000 is from the Research and Development appropriation. In 1986 the program includes accelerated model validation efforts needed to support the land banning program.

1985 Accomplishments

In 1985, the Agency obligated a total of $8,086,100 supported by 57.4 workyears for this program, of which $3,513,200 was from the Salaries and Expenses appropriation and $4,572,900 was from the Research and Development appropriation. During 1985, a report was issued on field verification of the use of microcosms, as was a report on the mobility of 2,3,7,8-TCDD in soils.

INTEGRATED HAZARDOUS WASTE RESEARCH

1987 Program Request

The Agency requests no resources for this activity in 1987.

1986 Program

In 1986, the Agency is allocating a total of $2,392,500 supported by no workyears for this program, all of which is from the Research and Development appropriation. The Agency is currently working with Tufts University on development of a comprehensive research program to address a wide variety of research as well as public policy issues. This research program is intended to address such issues as alternative technologies applications, land disposal practices, common public perceptions associated with disposal facilities and development of programs for public education.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,105,800 for this program from the Research and Development appropriation. These resources were used to establish and staff a Center for Environmental Management; develop a comprehensive plan addressing research, policy and education needs in the hazardous waste area; and initiate six health research projects, three policy projects, and two technology projects.

ENVIRONMENTAL PROTECTION AGENCY

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HAZARDOUS WASTE

Waste Management Regulations, Guidelines & Policies

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		(DOLLARS IN THOUSANDS)						
Regulations, Guidelines & Policies-Hazardous Waste								
Salaries & Expenses		$12,617.9	$15,954.5	$16,492.3	-$709.2	$15,783.1	$18,791.1	$3,008.0
Abatement Control and Compliance		$45,777.1	$54,191.0	$54,491.0	-$2,342.8	$52,148.2	$56,691.0	$4,542.8
	TOTAL	$58,395.0	$70,145.5	$70,983.3	-$3,052.0	$67,931.3	$75,482.1	$7,550.8
RCRA Regulatory Program - Office of Air and Radiation								
Salaries & Expenses		$245.5	$357.7	$736.7	-$31.6	$705.1	$575.7	-$129.4
Abatement Control and Compliance		$1,664.5	$2,765.0	$2,765.0	-$118.9	$2,646.1	$3,265.0	$618.9
	TOTAL	$1,910.0	$3,122.7	$3,501.7	-$150.5	$3,351.2	$3,840.7	$489.5
RCRA Regulatory Program - Office of Water								
Salaries & Expenses		$57.0	$604.4	$869.1	-$37.4	$831.7	$2,633.8	$1,802.1
Abatement Control and Compliance		$1,000.0	$5,100.0	$5,100.0	-$219.3	$4,880.7	$6,000.0	$1,119.3
	TOTAL	$1,057.0	$5,704.4	$5,969.1	-$256.7	$5,712.4	$8,633.8	$2,921.4
TOTAL:								
Salaries & Expenses		$12,920.4	$16,916.6	$18,098.1	-$778.2	$17,319.9	$22,000.6	$4,680.7
Abatement Control and Compliance		$48,441.6	$62,056.0	62,356.0	-$2,681.0	$59,675.0	$65,956.0	$6,281.0
Waste Management Regulations, Guidelines & Policies	TOTAL	$61,362.0	$78,972.6	$80,454.1	-$3,459.2	$76,994.9	$87,956.6	$10,961.7

HAZARDOUS WASTE

Waste Management Regulations, Guidelines & Policies

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)					
PERMANENT WORKYEARS							
Regulations, Guidelines & Policies-Hazardous Waste	234.2	270.4	284.4		284.4	279.2	-5.2
RCRA Regulatory Program - Office of Air and Radiation	5.6	8.0	19.0		19.0	13.0	-6.0
RCRA Regulatory Program - Office of Water	1.4	11.9	16.9		16.9	60.0	43.1
TOTAL PERMANENT WORKYEARS	241.2	290.3	320.3		320.3	352.2	31.9
TOTAL WORKYEARS							
Regulations, Guidelines & Policies-Hazardous Waste	263.3	303.5	317.5		317.5	313.5	-4.0
RCRA Regulatory Program - Office of Air and Radiation	5.6	8.0	19.0		19.0	13.0	-6.0
RCRA Regulatory Program - Office of Water	1.4	11.9	16.9		16.9	62.9	46.0
TOTAL WORKYEARS	270.3	323.4	353.4		353.4	389.4	36.0

HAZARDOUS WASTE

Waste Management Regulations, Guidelines, and Policies

Budget Request

The Agency requests a total of $87,956,600 supported by 389.4 total workyears for 1987, an increase of $10,961,700 and 36 total workyears over 1986. Of the request, $22,000,600 will be for the Salaries and Expenses appropriation and $65,956,000 will be for the Abatement, Control and Compliance appropriation, increases of $4,680,700 and $6,281,000 respectively.

Program Description

The program areas under this subactivity include:

Regulations, Guidelines, and Policies - Hazardous Waste -- This Headquarters program provides national management for the hazardous waste management program under the Resource Conservation and Recovery Act (RCRA), including the Hazardous and Solid Waste Amendments (HSWA) of 1984. Activities include promulgating and refining regulations for the identification, tracking, management, and disposal of hazardous wastes; providing national oversight and guidance for implementing consistent State and Regional hazardous waste permitting programs; providing guidance and technical assistance for implementing an effective national compliance monitoring and enforcement program; promulgating technical performance standards for underground storage tanks; conducting technical studies, regulatory impact analyses, and economic analyses; and assessing control options and technologies necessary for regulatory decision-making.

RCRA Regulatory Program - Office of Air and Radiation -- This program provides support for the development of air emission standards required by the 1984 Amendments for area sources at hazardous waste treatment, storage, and disposal facilities (TSDFs). This program assesses the nature and quantities of emissions at TSDFs, develops emission modeling and testing methods, assesses public health risks, and evaluates emission control techniques from which cost-effective regulations and standards can be promulgated.

RCRA Regulatory Program - Office of Water -- This program provides support for implementation of the 1984 Amendment requirements which impact water quality and drinking water programs. The Office of Water has lead responsibility for review of disposal of hazardous waste into injection wells; a study, regulation revisions, and corrective action requirements to address hazardous wastes in publicly owned treatment works; a study of the impact on groundwater from wastewater treatment lagoons; and rules and waivers for retrofitting surface impoundments.

REGULATIONS, GUIDELINES, AND POLICIES - HAZARDOUS WASTE

1987 Program Request

The Agency requests a total of $75,482,100 supported by 313.5 total workyears for this program, of which $18,791,100 will be for the Salaries and Expenses appropriation and $56,691,000 will be for the Abatement, Control, and Compliance appropriation. This represents increases of $3,008,000 and $4,542,800 respectively and a decrease of 4.0 total workyears. These levels support the Agency's efforts to provide technical enforcement expertise; to develop regulations, standards, and guidance in the underground storage tank program; and to resolve major issues by a greater reliance on site-specific risk-based decision making.

Regulatory Development, Revisions, and Analyses -- The Agency will accelerate its efforts to implement the activities initiated in 1985 and 1986 to manage hazardous waste. The Agency will use case-specific risk-based decision making, early public participation in rulemakings, and cross program/cross media coordination to improve the existing regulatory framework and to develop regulations based on requirements of the 1984 Amendments.

The Agency will place major emphasis on decisions to restrict the land disposal of certain hazardous wastes to protect ground water and air. The Agency will revise as appropriate the proposed waste banning decision framework and will reach decisions on dioxins, solvents and the California list wastes; promulgate alternate treatment standards for restricted wastes; and develop regulations for the petition process for land ban variances. Data development to support extensive waste characterization and capacity studies will be undertaken.

Another rulemaking priority will be the development of standards for new and existing underground storage tanks which contain petroleum products and hazardous substances. These standards will include performance standards for new tanks; standards for leak detection; regulations for reporting releases and corrective action requirements.

The Agency will promulgate and refine regulations to identify hazardous wastes and to provide major changes in their management and disposal. Currently scheduled waste listings (including PCBs) will be completed, an organic toxicity characteristic will be promulgated, and decisions will be reached on the additional delisting petitions generated by the land disposal restrictions. To ensure a consistent strategy for ground water protection, the Agency will promulgate standards for liners, leachate collection systems, and leak detection systems for the storage, treatment, or disposal of hazardous waste in landfills and surface impoundments. The Agency will provide technical guidance for retrofitting surface impoundments and review variance applications. The Agency will revise regulations on ground water monitoring methods and statistics to facilitate implementation.

The Agency will continue to close gaps in the regulatory framework. The Agency will promulgate regulations requiring that land disposal facilities provide assurance that sufficient funds are available for corrective action. The Agency will continue to prepare a Report to Congress on the need for Subtitle D criteria revisions and initiate any necessary revisions; continue the mining waste, utilities, and oil and gas studies; and provide Reports to Congress on Small Quantity Generators (SQGs). The Agency will promulgate administrative and technical standards for waste burned as fuel and will deliver a Report to Congress on dioxin emissions.

Program Implementation and Policy Guidance -- Most completed rulemakings will require intensive followup activities, including technical assistance to Regional and State personnel and the public, guidance documents, and technical interpretations of the rulemaking record during litigation. The Agency will prepare policy and technical guidance on corrective action, SQGs, waste ban petitions, burning and blending, health assessment provisions, and underground storage tanks. The Agency will continue to send Permit Assistance Teams to the field to assist in permit processing, and will continue the SQG education/assistance program. The Agency will continue to provide technical enforcement case support and technical assistance in compliance monitoring, particularly for work at commercial and Federal facilities.

The Agency will ensure that timely and appropriate enforcement actions are taken, that adequate inspections and reviews are conducted, and that appropriate policy, guidance, and strategies are developed to assist Regions and States in their enforcement programs. Training and enforcement workshops for Regions and States will be continued in areas such as ground water compliance, corrective action, and enforcement of closure plans and permits.

The Agency will provide oversight and assistance to States in implementing the Underground Storage Tanks program. This assistance will include review of State regulatory development and preparation of State authorization approval packages along with policies and guidances.

1986 Program

In 1986, the Agency is allocating a total of $67,931,300 supported by 317.5 total workyears for this program, of which $15,783,100 is from the Salaries and Expenses appropriation and $52,148,200 is from the Abatement, Control, and Compliance appropriation.

Regulatory Development, Revision, and Analyses -- The Agency is continuing to respond to the expanded and accelerated schedule mandated by the 1984 Amendments. The Agency is proposing the decision framework for banning wastes from land disposal, evaluating alternative treatment capacity studies, proposing waste oil regulations and waste as fuel technical standards, promulgating regulations for SQGs and conducting a public education program for the expanded regulated community, and closing gaps in the regulatory structure by continuing to propose and promulgate hazardous waste listings and delistings, proposing an organic toxicity characteristic, promulgating final hazardous waste tank standards, and modifying financial assurance regulations. Underground storage tank regulations will be proposed, including tank standards, standards for leak detection, regulations for reporting releases, and corrective action requirements.

The Agency is proposing regulatory revisions to Appendix VIII ground water monitoring and alternative concentration levels and proposing regulations for liner and leak detection and disposal of liquids in landfills. The Agency is promulgating the codification rule and the State authorization rule.

The Agency is producing a mining report and a utility report to Congress, a mining waste exclusion reinterpretation, and is proposing or promulgating four procurement guidelines.

Program Implementation and Policy Guidance -- The Agency is developing implementation plans for all regulations to ensure integrated cross media/cross program coordination and to expedite guidance development and permit issuance. The Agency is developing guidances for effective and consistent ground water protection to include land disposal ban petition review, location criteria, retrofitting and liner construction, ground water monitoring parameters, managing liquids in landfills, closure and post-closure requirements, and correction of environmental problems from past mismanagement of waste at RCRA facilities.

To ensure a consistent national program, the Agency is conducting annual program implementation reviews. The Agency will continue to provide training and revise guidance manuals and technical resource documents to implement the hazardous waste treatment, storage, and disposal facility permitting standards. The Agency will provide guidance on facility management planning and the Federal facilities inventory.

The Agency is providing technical enforcement case support and compliance monitoring and enforcement guidance documents on ground water, corrective action, closure, and permit enforcement. In addition, compliance monitoring inspection support and guidance is provided.

The Agency is emphasizing the notification program in the underground storage tank program. The States are being supported in the development and implementation of the notification programs.

1985 Accomplishments

In 1985, the Agency obligated $58,395,000 supported by 263.3 total workyears for this program, of which $12,617,900 was from the Salaries and Expenses approporiation and $45,777,100 was from the Abatement, Control, and Compliance appropriation.

Regulatory Development, Revision, and Analyses -- The Agency continued to close gaps in the regulatory program. In conjunction with the proposed SQG regulation, a major public outreach program was initiated. The Agency proposed administrative fuel standards, hazardous waste tanks standards, closure and post-closure regulations, and a storage class permit regulation.

The Agency proposed the land disposal restriction schedule and initiated alternative treatment and capacity studies. In conjunction with land disposal restrictions, the Agency continued to test, document, and propose the listing of wastes from processes within various organic chemical industries and promulgated the dioxin listing.

The Agency continued to review and revise existing regulations. The Agency completed the financial assurance analyses, prepared a Report to Congress on the Post Closure Liability Trust Fund, proposed closure/post-closure regulations, revised the definition of solid waste, proposed the solvent mixture rule, continued to study performance and operating criteria for Subtitle D facilities, and submitted a Subtitle D Funding Report.

The Agency proposed and finalized the regulation on notification by underground storage tank owners.

Program Implementation and Policy Guidance -- The Agency issued rules which codified in regulation those HSWA requirements which had immediate short-term effects on the regulated community and provided procedural and interpretive guidances on those regulations. In addition, the Agency assisted the Regions and States in understanding the effect that HSWA will have on State hazardous waste management programs and developed program guidance in such areas as corrective action, exposure assessment, and research and development permits. The Agency provided support and training for Regional and State permit writers, inspectors, and compliance staff. The Agency provided guidance in implementing a Facility Management Strategy to integrate permit and enforcement authorities.

The Agency provided technical expertise to Regions and States for siting assistance, case development, corrective actions, and problem solving for permit/compliance/enforcement actions. The Enforcement Response Policy and the RCRA Ground Water Monitoring Compliance Order Guidance were issued.

The Agency developed a common notification form, reporting and information management formats, and a Program Handbook for States to use in implementing their underground storage tank notification programs.

RCRA REGULATORY PROGRAM - OFFICE OF AIR AND RADIATION

1987 Program Request

The Agency requests a total of $3,840,700 supported by 13.0 total workyears for this program, of which $575,700 will be for the Salaries and Expenses appropriation and $3,265,000 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $129,400 in the Salaries and Expenses appropriation and a decrease of 6.0 total workyears. The Abatement, Control, and Compliance appropriation will be increased by $618,900. This increase will support an acceleration of TSDF regulatory development.

In 1987, the program will continue the work begun in 1985 to support the proposal of regulations for TSDF area source types. This will include an assessment of the nature and quantities of emissions for TSDFs, development of emission modeling and testing methods, assessment of public health risks, evaluation of emission control techniques and economic analyses. As a result of these efforts, the Agency expects to propose regulations for seven types of area sources: landfills, surface impoundments, land treatment, containers, waste piles, storage tanks, and transfer operations.

1986 Program

In 1986, the Agency is allocating a total of $3,351,200 supported by 19.0 total workyears for this program, of which $705,100 is from the Salaries and Expenses appropriation and $2,646,100 is from the Abatement, Control and Compliance appropriation.

In 1986, efforts are continuing on the development of air emission regulations for TSDF area sources. Work in process includes the development of the required information and data, as well as technical and economic analyses for the regulation of these sources.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,910,000 supported by 5.6 total workyears for this program. Of the amount obligated, $245,500 was from the Salaries and Expenses appropriations and $1,664,500 was contract work from the Abatement, Control and Compliance appropriation. The contract resources were used to continue standards development work for TSDF sources.

In 1985, efforts continued on the development of air emission regulations for TSDF area sources.

RCRA REGULATORY PROGRAM - OFFICE OF WATER

1987 Program Request

The Agency requests a total of $8,633,800 supported by 62.9 total workyears for this program, of which $2,633,800 is for the Salaries and Expenses appropriation and $6,000,000 is for the Abatement, Control and Compliance appropriation. This represents an increase of $1,802,100 and $1,119,300, respectively, and an increase of 46.0 workyears.

The 1987 program includes resources for the new effort in the EPA Regions and Headquarters to implement the corrective action requirement for publicly owned treatment works (POTWs) that accept hazardous waste. In addition, it will provide new resources to the Regions to review applications received from NPDES facilities with surface impoundments for exemption from the new RCRA technology requirements under Section 3005(j) of the 1984 amendments. Finally, the increase provides for an acceleration of regulatory activities to issue the proposed major rule to restrict wastes into Class I Underground Injection Control (UIC) wells by August, 1987.

In 1987 various studies will be performed under contract to address problems identified in the domestic sewage study concerning hazardous waste coming into POTWs, to provide technical backup to the review of double liner exemption applications, to develop technical guidance to implement corrective action for POTWs, and to complete the various technical studies in support of the major rule to restrict hazardous wastes to deep injection wells (designated in Class I by the UIC program).

Section 3018(a) of the 1984 RCRA amendments requires EPA to submit a report to Congress by February, 1986 evaluating the type and volume of hazardous wastes going to POTWs and their fate and effects. Section 3018(b) requires EPA by August 1987 (i.e., within 18 months after the report to Congress) to adopt regulatory changes to assure that hazardous substances passing through POTWs, and other problems identified in the Congressional report, are adequately controlled to protect human health and the environment. In support of these requirements, EPA will strengthen management of hazardous waste going to POTWs through revisions to requirements and procedures under NPDES, general pretreatment, industrial categorical standards, and sludge criteria.

Under Section 3005(j), RCRA interim status surface impoundments must comply with new technology requirements (e.g., double liner), unless EPA grants a waiver for facilities subject to NPDES permit requirements for treatment impoundments meeting certain specified criteria. In 1987, the EPA water program will review exemption applications and, where appropriate, modify existing permits to incorporate changes resulting from the exemption decision.

RCRA facilities receiving a permit after November 8, 1984, will require corrective action for any release of hazardous constituents from a solid waste management unit at the facility. POTWs are RCRA facilities by rule if they receive hazardous waste by truck or rail (under 40 CFR Section 270.60(c)), and must comply with this new requirement at the time of NPDES permit issuance. It is estimated that 2,000 NPDES municipal permits will be issued before the end of 1987, of which 10-15% (or 275) will be covered by this new requirement. In 1987, EPA will complete preliminary assessments and site investigations and pursue remedial investigations, where warranted.

EPA is also required to determine when injection of hazardous wastes into Class I UIC wells is protective to human health and the environment. A determination is required for each hazardous waste listed in the RCRA regulations (Part 261). Determinations must be made for 21 specific waste streams by August, 1988. All other determinations must be made in two steps by June, 1990. In 1987, EPA will complete all preregulatory technical analyses and propose a decision for the 21 waste streams in August, 1987. A Regulatory Impact Statement (RIA) will also be completed by August, 1987.

EPA is required to submit a report to Congress by November, 1987, on the impacts of municipal wastewater treatment lagoons on groundwater quality. EPA has funded 6,000 lagoons through the construction grants program. In 1987, EPA will complete all technical analyses and the final report for Agency submission.

1986 Program

In 1986, the Agency is allocating a total of $5,712,400, supported by 16.9 total workyears for this program, of which $831,700 is from the Salaries and Expenses appropriation and $4,880,700 is from the Abatement, Control, and Compliance appropriation.

During 1986, the Agency is submitting to Congress the domestic sewage study required under Section 3018(a) and beginning regulatory planning to control hazardous waste problems identified in the report. EPA is also developing policy and technical guidance to implement the double liner exemption provisions and the new corrective action provisions for POTWs. During 1986, EPA is also completing sampling and analysis and other technical data collection in support of the wastewater lagoon study, which is to be completed during 1987.

In addition, the 1984 amendments are likely to reduce the number of land disposal facilities available to receive hazardous waste while at the same time increasing the amount and type of waste subject to management as a hazardous waste. As a result, there will be increased demand for commercial incinerators, including incinerator vessels. EPA is developing an incineration regulation in parallel with the implementation of its ocean incineration research program.

Finally, the Agency is completing most of the preregulatory planning technical studies in 1986 for the rule to restrict hazardous waste from Class I UIC wells. Studies will cover both the engineering factors and waste analyses necessary to develop a decision rule to make waste restriction determinations.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,057,000, supported by 1.4 total workyears, of which $57,000 was from the Salaries and Expenses appropriation and $1,000,000 was from the Abatement, Control, and Compliance appropriation.

During 1985, EPA began major new workgroup efforts to implement the RCRA requirements related to domestic sewage, the double liner requirements, and the restriction of hazardous waste to Class I UIC wells. EPA submitted a final report to Congress on May 8, 1985 on Class I UIC wells, as required under Section 701 of the 1984 RCRA amendments.

HAZARDOUS WASTE

Financial Assistance

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Hazardous Waste Management Financial Assistance To States								
Abatement Control and Compliance		$46,663.2	$58,000.0	$58,000.0	-$2,494.0	$55,506.0	$63,000.0	$7,494.0
	TOTAL	$46,663.2	$58,000.0	$58,000.0	-$2,494.0	$55,506.0	$63,000.0	$7,494.0
Hazardous Waste Management Compliance Grants								
Abatement Control and Compliance		$5,000.0						
	TOTAL	$5,000.0						
Hazardous Waste Management Initiative Grants								
Abatement Control and Compliance		$5,048.5		$4,750.0	-$204.3	$4,545.7		-4,545.7
	TOTAL	$5,048.5		$4,750.0	-$204.3	$4,545.7		-4,545.7
Underground Storage Tanks State Grants								
Abatement Control and Compliance			$7,000.0	$7,000.0	-$301.0	$6,699.0	$10,000.0	$3,301.0
	TOTAL		$7,000.0	$7,000.0	-$301.0	$6,699.0	$10,000.0	$3,301.0
TOTAL:								
Abatement Control and Compliance		$56,711.7	$65,000.0	$69,750.0	-$2,999.3	$66,750.7	$73,000.0	$6,249.3
Financial Assistance	TOTAL	$56,711.7	$65,000.0	$69,750.0	-$2,999.3	$66,750.7	$73,000.0	$6,249.3

HAZARDOUS WASTE

Financial Assistance to States

Budget Request

The Agency requests a total of $73,000,000 for 1987, an increase of $6,249,300 from 1986. All of the request will be for the Abatement, Control, and Compliance appropriation. The two programs with funding requests in 1987, Hazardous Waste Management Financial Assistance to States and Underground Storage Tank State Grants, will remain categorical grants through 1987. However, the Agency plans to include them in the Pollution Control Block Grant starting in 1988.

Program Description

The program areas under this subactivity include:

Hazardous Waste Management Financial Assistance to States -- This program provides financial assistance to States for the development, implementation, and enforcement of comprehensive hazardous waste management programs that meet the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA). States are required to provide a 25 percent match to these funds. Objectives of the grant program are to provide incentives to the States to 1) develop and administer State hazardous waste management programs controlling the generation, transportation, storage, treatment, and disposal of hazardous wastes; 2) develop environmentally sound permits for as many priority hazardous waste management facilities as possible; and 3) enforce hazardous waste management program regulations to protect human health and the environment.

The Hazardous and Solid Waste Amendments (HSWA) of 1984 have greatly expanded the hazardous waste management programs in the States. HSWA has increased the number and complexity of requirements that States must meet to achieve equivalence with the Federal hazardous waste management program. The 1984 Amendments strengthened requirements for corrective action, broadened restrictions on the land disposal of hazardous waste, and set deadlines for the issuance of RCRA permits.

Hazardous Waste Management Compliance Grants -- This program provides financial assistance to State agencies to improve and evaluate environmental compliance through increased enforcement, training, permitting, and technical assistance.

Hazardous Waste Initiative Grants -- This program provides financial assistance to foster State and local hazardous waste management efforts focused on innovative waste management activities, such as waste reduction, waste exchange, siting, use of alternatives to land disposal, and assistance to small quantity generators.

Underground Storage Tank State Grants -- This program supports development and implementation of the State Underground Storage Tank (UST) programs. States will develop specific regulatory standards and the necessary enforcement authorities to ensure compliance to those standards. State grants are to be used for the development and implementation of State underground storage, release, detection, prevention, and corrective action programs.

HAZARDOUS WASTE MANAGEMENT FINANCIAL ASSISTANCE TO STATES

1987 Program Request

The Agency requests a total of $63,000,000 for this program, all of which will be for Abatement, Control, and Compliance appropriation. This represents an increase of $7,494,000. This increase will support State implementation of the 1984 Amendment provisions, including inspections, enforcement actions, and corrective action measures.

In 1987, the Agency will provide financial assistance to the States to revise State programs to incorporate the requirements of HSWA. The States will develop legislation and regulations consistent with the HSWA requirements, and will develop and submit applications for authorization for HSWA provisions as they become effective. In implementing the joint permitting process with the Regions, the States will issue the portions of the RCRA permit for which they are authorized. The States will participate in implementing the requirements of HSWA for which they are not authorized, particularly corrective action.

The States will implement the National Permits Strategy (NPS), which places high priority on permit applications for land disposal facilities, commercial incinerators, facilities seeking to expand treatment and incineration capacity, and Research, Development and Demonstration (RD&D) permit applications. The States and Regions will jointly use the facility management planning process which identifies environmentally significant facilities and more effectively applies permitting and enforcement authorities on a facility-by-facility basis. The 1984 Amendments mandate that the States and EPA process permit applications for land disposal and incineration facilities within four and five years, respectively. The States will also begin to call in permit applications for burner/blender facilities.

The States, in conjunction with the Regions, will continue to focus on improving compliance with the regulatory requirements at facilities, generators, and transporters. States will perform an estimated 9,100 compliance monitoring inspections. Emphasis at land disposal facilities will be on evaluating the adequacy of ground water monitoring systems and identifying releases. Other storage, treatment and disposal facilities will be inspected at least biennially as required by statute. Inspections of generators and transporters will be conducted to ensure that proper manifesting of hazardous waste is occurring as land disposal of hazardous waste becomes more restrictive and costly. Fuel blenders will be inspected as permit applications for these facilities are called in.

State enforcement programs will continue to take timely and appropriate enforcement actions. States will issue, as necessary, administrative enforcement actions, including warning letters and administrative orders, with civil penalties as appropriate, in response to significant violations. States will pursue civil and criminal judicial actions when appropriate. As with the Regions, significant efforts will be made by the States to bring ground water cases successfully to conclusion. The States will have major involvement in corrective action measures to identify and investigate releases.

1986 Program

The Agency is allocating a total of $55,506,000 for this program, all of which is from the Abatement, Control, and Compliance appropriation.

The States are continuing to develop hazardous waste management programs equivalent to the Federal program. It is anticipated that all participating States will be authorized for the pre-HSWA program by the end of 1986. The States are developing legislation and regulations consistent with the HSWA requirements and submitting applications for authorization for the various provisions of HSWA as they become effective. The States are processing permits jointly with the Regions for those HSWA provisions for which they are not authorized.

The States are implementing the National Permits Strategy, placing a high priority on permit applications for land disposal facilities, commercial incinerators, facilities seeking to expand treatment and incineration capacity, and RD&D permit applications. The States are developing facility management plans jointly with the Regions for land disposal and other environmentally significant facilities and are reviewing additional exposure assessment information for landfills and surface impoundments. The States are reviewing closure plans for the closing land disposal facilities.

The States are concentrating their compliance monitoring and enforcement efforts on strengthening the enforcement presence in the regulated community. State compliance monitoring and enforcement actions are concentrated on those facilities which pose the greatest potential for environmental problems, such as land disposal facilities. All land disposal facilities, whether operating or closed, will be inspected. Emphasis is focused on those facilities that did not certify compliance to ground water monitoring requirements as required by the 1984 Amendments. Inspections and appropriate enforcement actions will be taken at those facilities that falsely certified to the 1984 Amendment requirements. The State will ensure that timely and adequate closure plans are received.

States are initiating assessments and investigations of releases at facilities to require corrective action measures be taken by the owner/operator. When violations are detected, States are issuing enforcement actions, including warning letters and administrative orders, as well as taking civil and criminal actions.

1985 Accomplishments

In 1985, the Agency obligated $46,663,200, all of which was from the Abatement, Control, and Compliance appropriation. These grant funds supported the development and authorization of State hazardous waste management programs, implementation of authorized programs, and the implementation of the Federal program in unauthorized States through Cooperative Arrangements.

The States continued to develop hazardous waste management programs equivalent to the Federal program. By the end of 1985, 26 States had achieved final authorization for the pre-HSWA program. In addition, the States began to develop legislation and regulations consistent with the provisions of HSWA.

The States continued to implement the National Permits Strategy. By the end of 1985, the States and Regions had requested 679 permit applications and had completed 298 final determinations. In addition, the States began the process of developing facility management plans for environmentally significant facilities.

In conjunction with the Regions, States concentrated their inspections and enforcement efforts on strengthening the compliance monitoring presence in the regulated community. The States conducted 14,540 compliance inspections. State compliance monitoring activities focused on ground water monitoring, closure and financial assurance requirements, and proper disposal, storage, labeling, and manifesting of hazardous waste. Where violations were detected, States initiated enforcement actions to bring the facility or handler into compliance.

HAZARDOUS WASTE MANAGEMENT COMPLIANCE GRANTS

1987 Program Request

The Agency requests no funds for this program. Resources to support the permitting and enforcement activities of the National Permits Strategy are included in the Hazardous Waste Management Financial Assistance to States program element.

1986 Program

The Agency requested no funds for this program. Resources to support the permitting and enforcement activities of the National Permits Strategy are included in the Hazardous Waste Management Financial Assistance to States program element.

1985 Accomplishments

In 1985, the Agency allocated a total of $5,000,000 for this program, all of which was from the Abatement, Control, and Compliance appropriation. Funding was provided by a one-time Congressional Add-on. These resources were provided to State agencies to increase permitting and enforcement activities in support of the National Permits Strategy (NPS). States used these funds to demonstrate how to accelerate implementation of the NPS.

HAZARDOUS WASTE MANAGEMENT INITIATIVE GRANTS

1987 Program Request

The Agency requests no funds for this program. Resources to support activities under this program are provided under the Hazardous Waste Management Financial Assistance to States program.

1986 Program

In 1986, the Agency is allocating a total of $4,545,700 for this program, all of which is from the Abatement, Control, and Compliance appropriation. These funds are being awarded to State and local agencies for developing and implementing hazardous waste management efforts focused on innovative waste management activities, and for accelerating permit issuance to new or expanding hazardous waste management facilities which provide alternatives to land disposal.

1985 Accomplishments

In 1985, the Agency allocated a total of $5,048,500 for this program, all of which is from the Abatement, Control, and Compliance appropriation. These funds were awarded to State and local agencies to develop or implement innovative hazardous waste management efforts such as waste reduction, waste exchange, siting, use of alternatives to land disposal, and assistance to small quantity generators.

UNDERGROUND STORAGE TANK STATE GRANTS

1987 Program Request

The Agency requests a total of $10,000,000 for this program, all of which will be for the Abatement, Control, and Compliance appropriations. This represents an increase of $3,301,000. This level reflects the increase in State workload neccessary to support the implementation and enforcement of Subtitle I provisions of the 1984 RCRA Amendments.

The Agency will provide resources to the States to continue the development and implementation of the State programs. States will develop specific regulatory standards and will apply for Agency approval of the State program. Enforcement efforts will focus on implementation of the interim prohibition requirements, the notification program, and the development of comprehensive compliance and enforcement programs.

1986 Program

In 1986, the Agency is allocating a total of $6,699,000 for this program, all of which is from the Abatement, Control, and Compliance appropriation.

UST grant funds are being used to develop State UST programs. A major activity is the development, printing, distribution, receipt, and processing of UST notification forms. This includes the development of a data management and analysis system for these notifications. States are developing both statutory and regulatory authorities for State UST programs. States are also exploring and developing multi-year funding strategies such as fees to provide State funding mechanisms.

1985 Accomplishments

No resources were requested for this program in 1985. The regulatory basis for the program was not in place in 1985. As required by the 1984 Amendments, Governors designated State agencies to manage the UST notification program.

HAZARDOUS WASTE

Waste Management Strategies Implementation

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Hazardous Waste Management Regulatory Strategies Implementation								
Salaries & Expenses		$16,907.1	$18,490.1	$15,385.9	-$661.6	$14,724.3	$14,757.4	$33.1
Abatement Control and Compliance		$3,054.9	$6,986.0	$3,986.0	-$171.4	$3,814.6	$3,486.0	-$328.6
	TOTAL	$19,962.0	$25,476.1	$19,371.9	-$833.0	$18,538.9	$18,243.4	-$295.5
TOTAL:								
Salaries & Expenses		$16,907.1	$18,490.1	$15,385.9	-$661.6	$14,724.3	$14,757.4	$33.1
Abatement Control and Compliance		$3,054.9	$6,986.0	$3,986.0	-$171.4	$3,814.6	$3,486.0	-$328.6
Waste Management Strategies Implementation	TOTAL	$19,962.0	$25,476.1	$19,371.9	-$833.0	$18,538.9	$18,243.4	-$295.5
PERMANENT WORKYEARS								
Hazardous Waste Management Regulatory Strategies Implementation		408.0	449.5	365.0		365.0	348.0	-17.0
TOTAL PERMANENT WORKYEARS		408.0	449.5	365.0		365.0	348.0	-17.0

HAZARDOUS WASTE

Waste Management Strategies Implementation

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Hazardous Waste Management Regulatory Strategies Implementation	456.7	502.7	423.9		423.9	404.7	-19.2
TOTAL WORKYEARS	456.7	502.7	423.9		423.9	404.7	-19.2

HAZARDOUS WASTE

Waste Management Strategies Implementation

Budget Request

The Agency requests a total of $18,243,400 supported by 404.7 total workyears for 1987, a decrease of $295,500 and 19.2 total workyears from 1986. Of the request, $14,757,400 will be for the Salaries and Expenses appropriation and $3,486,000 is for the Abatement, Control and Compliance appropriation, an increase of $33,100 and a decrease of $328,600 respectively.

Program Description

Hazardous Waste Management Regulatory Strategies Implementation -- This program supports Regional implementation of the hazardous waste management program mandated under the Resource Conservation and Recovery Act (RCRA), including the Hazardous and Solid Waste Amendments (HSWA) of 1984. The Regions assist the States in developing hazardous waste management programs equivalent to the Federal program by providing guidance and technical assistance for developing program capabilities and authorization applications, and by jointly processing permit applications until the States are authorized for HSWA. In addition, the Regions oversee State programs to ensure that implementation of RCRA is carried out in a nationally consistent manner and that minimum RCRA standards are followed. This program also supports Regional activities to directly implement the hazardous waste management program in States that are not authorized.

HAZARDOUS WASTE MANAGEMENT REGULATORY STRATEGIES IMPLEMENTATION

1987 Program Request

The Agency requests a total of $18,243,400 supported by 404.7 total workyears for this program, of which $14,757,400 will be for the Salaries and Expenses appropriation and $3,486,000 will be for the Abatement, Control, and Compliance appropriation. This represents an increase of $33,100 and a decrease of $328,600 respectively and a decrease of 19.2 total workyears. The Salaries and Expenses increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The reductions reflect the additional number of States expected to receive pre-HSWA authorization in 1986 and the increased capabilities to the States to implement the RCRA permit program. This request supports Regional assistance to the States and development of program capabilities equivalent to the Federal program. In addition, this amount also supports the Agency permitting and closure plan review workload and oversight of the States activities in these areas. The Agency will provide increased attention to those activities that pertain to ground water releases and hydrogeological characterization.

State program development will be a priority in the Regions in 1987. State programs must be revised to incorporate the new requirements of HSWA. The Regions will review and provide technical assistance to the States as they develop legislation and regulations consistent with the provisions of HSWA. The Regions will review authorization applications against equivalence criteria, recommend approval of applications, and negotiate State grants and Cooperative Arrangements. Because States may apply for authorization for each HSWA provision as it becomes effective, there will be an increasing number of applications which the Regions must review and approve.

Throughout 1987, the Regions will jointly process permit applications with the States until the States become authorized for HSWA provisions. The Regions will continue to implement the National Permits Strategy (NPS). The NPS reflects the impact of HSWA by placing a high priority on permit applications for land disposal facilities, commercial incinerators, facilities seeking to expand treatment and incineration capacity, and Research, Development and Demonstration (RD&D) permit applications. The 1984 Amendments mandate that EPA and the States process permit applications for land disposal and incineration facilities within four and five years, respectively. The Agency will continue to implement a facility management planning process which will identify environmentally significant facilities and more effectively apply permitting and enforcement authorities on a facility-by-facility basis. Permit activity for land disposal and other environmentally significant facilities will increase as corrective actions are addressed and incorporated in permits. This will allow applications to move forward to the draft permit and final determination phases. Burner/blender permit applications will be called-in so that permit processing can begin for these newly-regulated hazardous waste handlers.

An important activity of the Regions will be to provide adequate oversight of State permitting activities. Regions will review State permit actions to ensure technical adequacy, enforceability, and national consistency as well as to provide State permit writers with additional technical assistance. The Agency will provide specific guidance during the review of the more complex regulatory requirements such as corrective action, and closure and post-closure plans. In addition, the Regions will implement the Agency's national oversight policy through evaluations of State performance, including program reviews, file audits, and analysis of routine reports.

The Regions will provide assistance to the States in the development of underground storage tank (UST) programs. The Regions will begin to review and approve state UST program applications and to negotiate and oversee State UST grants.

1986 Program

In 1986, the Agency is allocating a total of $18,538,900 supported by 423.9 total workyears for this program, of which $14,724,300 is for the Salaries and Expenses appropriation and $3,814,600 is for Abatement, Control, and Compliance appropriation.

The Regions are assisting the States in the development of hazardous waste management programs equivalent to the Federal program. HSWA established a January 1986 deadline for States to receive authorization for the pre-HSWA program. The Agency anticipates that all 51 participating States will be fully authorized for the pre-HSWA program by the end of 1986. As States achieve full authorization, the Agency is performing an increasing oversight and technical support function for the pre-HSWA program. In addition, the Regions are reviewing and providing technical assistance to the States as they develop legislation and regulations consistent with the provisions of HSWA.

The Agency and the States are jointly processing permit applications. The Regions are issuing those portions of the RCRA permit that include HSWA provisions for which the States are not authorized. The Regions are implementing the National Permits Strategy. The Regions are developing facility management plans for land disposal and other environmentally significant facilities, and are beginning to review additional exposure assessment information for landfills and surface impoundments. The Regions are also facing a large closure plan review workload in 1986. In addition, the Regions are overseeing State permit actions on facilities to ensure national consistency, providing technical assistance to State permit writers, and conducting State program reviews.

1985 Accomplishments

In 1985, the Agency obligated a total of $19,962,000 supported by 456.7 total workyears of which $16,907,100 was for Salaries and Expenses appropriation and $3,054,900 was for the Abatement, Control, and Compliance appropriation.

The Regions focused on assisting States to achieve authorization to implement a hazardous waste management program equivalent to the Federal program. By the end of 1985, twenty-six States had achieved full authorization for the pre-HSWA program. In addition, the States began to develop legislation and regulations consistent with the provisions of HSWA.

The Regions continued to implement the National Permits Strategy. The Regions and States requested 679 permit applications and completed 298 final determinations. In addition, the Regions began the process of developing facility management plans for environmentally significant facilities.

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HAZARDOUS WASTE

Hazardous Waste Enforcement

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Hazardous Waste Enforcement								
Salaries & Expenses		$7,834.3	$11,716.3	$15,556.3	-$668.9	$14,887.4	$15,211.2	$323.8
Abatement Control and Compliance		$1,652.3	$6,250.0	$9,250.0	-$397.8	$8,852.2	$11,250.0	$2,397.8
	TOTAL	$9,486.6	$17,966.3	$24,806.3	-$1,066.7	$23,739.6	$26,461.2	$2,721.6
TOTAL:								
Salaries & Expenses		$7,834.3	$11,716.3	$15,556.3	-$668.9	$14,887.4	$15,211.2	$323.8
Abatement Control and Compliance		$1,652.3	$6,250.0	$9,250.0	-$397.8	$8,852.2	$11,250.0	$2,397.8
Hazardous Waste Enforcement	TOTAL	$9,486.6	$17,966.3	$24,806.3	-$1,066.7	$23,739.6	$26,461.2	$2,721.6
PERMANENT WORKYEARS								
Hazardous Waste Enforcement		198.9	280.3	395.1		395.1	392.0	-3.1
TOTAL PERMANENT WORKYEARS		198.9	280.3	395.1		395.1	392.0	-3.1
TOTAL WORKYEARS								
Hazardous Waste Enforcement		219.7	300.5	425.2		425.2	425.2	
TOTAL WORKYEARS		219.7	300.5	425.2		425.2	425.2	

HAZARDOUS WASTE

Hazardous Waste Enforcement

Budget Request

The Agency requests a total of $26,461,200 supported by 425.2 total workyears for 1987, an increase of $2,721,600. Of the request, $15,211,200 will be for the Salaries and Expenses appropriation and $11,250,000 is for the Abatement, Control, and Compliance appropriation, increases of $323,800 and $2,397,800 respectively.

Program Description

Hazardous Waste Enforcement -- This program serves to ensure national compliance with the Resource Conservation and Recovery Act (RCRA), including the Hazardous and Solid Waste Amendments of 1984 (HSWA). The principal objectives are to inspect and evaluate hazardous waste generator, transporter, and facility compliance with the statutory and regulatory requirements of RCRA; to take appropriate administrative, civil, and criminal enforcement actions, including activities for corrective action; and to assist and evaluate program implementation in the States. This program supports Regional activities to operate and enforce the Federal regulatory program in States which have not received authorization. These activities include compliance monitoring and enforcement actions at interim status facilities, permitted facilities, hazardous waste generators, and at underground storage tanks.

The Agency is also responsible for providing technical assistance and evaluating programs in authorized and Cooperative Arrangement States to assess their progress in conducting hazardous waste compliance monitoring and enforcement activities. The Regional program oversees implementation of RCRA in those States which are authorized. This oversight includes periodic review of States' monitoring and enforcement accomplishments and taking appropriate enforcement actions when States do not act.

HAZARDOUS WASTE ENFORCEMENT

1987 Program Request

The Agency requests a total of $26,461,200 supported by 425.2 total workyears, of which $15,211,200 will be for the Salaries and Expenses appropriation, and $11,250,000 will be for the Abatement, Control, and Compliance appropriation. This represents increases of $323,800 and $2,397,800, respectively, with no change in total workyears. The increases support additional workload associated with corrective action activities.

Compliance with ground water protection requirements continues as a high RCRA priority. The Agency will conduct compliance evaluation inspections for ground water monitoring at facilities that are operating or are closed. Facilities subject to ground water monitoring requirements will receive a detailed technical evaluation to ensure that the facility hydrogeology is adequately characterized, that monitoring wells have been properly located and installed, that sampling and analysis are conducted adequately, and that expanded monitoring is undertaken to assess detected leakage. The Agency will also increase the level of sampling effort associated with compliance and investigations for releases to ensure that adequate independent sampling is conducted.

The Agency will perform thorough inspections at all Federal, State and local government owned or operated treatment, storage, and disposal facilities (TSDFs). The Agency will conduct inspections at commercial facilities to ensure that these facilities are environmentally acceptable to support off-site management of Superfund wastes. The Regions will conduct inspections and technical evaluations of compliance with closure and post-closure plans, and financial assurance instruments for hazardous waste facilities in unauthorized States and will provide support for those evaluations in authorized States. This will be a substantial endeavor in view of the large number of land disposal unit closures in 1986.

The Agency will continue its expanded enforcement efforts tied to ground water closures, the more stringent requirements of the 1984 Amendments, and the implementation of the Enforcement Response Policy. Implementation of the RCRA Ground Water Monitoring Technical Enforcement Guidance, along with the Interim National Criteria which provides the basic goals and Region/State performance expectations for the RCRA program, will ultimately lead to significant improvements in the rate of compliance with the RCRA program. To secure improved compliance with RCRA standards, the Regions will take enforcement actions when and where appropriate. Significant efforts will be made to bring existing ground water cases successfully to a conclusion and to oversee implementation of remedies. Enforcement resources will be provided to continue Regional support of the permitting program. In addition to inspections, Regions will support enforcement actions in response to violations occurring during the permit, closure, or post-closure process. The Regions will also continue their support for civil referrals and criminal investigations.

Major efforts will be made to undertake corrective action measures at operating and closed facilities, including identifying and investigating releases at solid waste management units. Where appropriate, the Agency will require corrective action at these facilities through administrative orders, schedules of compliance, or judicial actions.

The Agency will continue State program evaluations and technical support. The Regions will conduct program reviews of the compliance monitoring and enforcement programs, including corrective action, in all participating States. In addition, the Regions will conduct oversight inspections and initiate enforcement actions in States that fail to secure compliance in a timely fashion, or in response to a State request for enforcement assistance. The Regions will continue to promote timely and appropriate enforcement actions by the States and will offer technical assistance, sampling, laboratory analysis, and other technical expertise as needed. Regional oversight and assistance for States' underground storage tank and small quantity generator programs will be supported.

1986 Program

In 1986, the Agency is allocating a total of $23,739,600 supported by 425.2 total workyears, of which $14,887,400 is for the Salaries and Expenses appropriation and $8,852,200 for the Abatement, Control, and Compliance appropriation.

The Agency is significantly expanding the hazardous waste enforcement program to address ground water compliance and to support the implementation of the 1984 Amendments. These Amendments have major workload requirements in the following areas: actions to compel corrective action at facilities where prior releases or off-site contamination have occurred; mandatory annual inspections of Federal, State and local government owned or operated facilities; inspections by EPA (or authorized States) at privately operated TSDFs at least every two years; and compliance with double liner requirements at land disposal units.

The Regions are conducting the annual compliance inspections at Federal, State and local government owned or operated facilities. The Regions and States are conducting inspections every six months at those off-site facilities that receive Superfund wastes to ensure that these facilities are in compliance with RCRA standards and do not pose a human health or environmental threat.

The Regions are increasing their efforts in unauthorized States to focus compliance evaluation inspections on ground water monitoring systems. The Regions continue to assist the States in conducting technical reviews of closure and post-closure plans, and financial assurance instruments for all land disposal facilities.

Where inspections or report reviews reveal violations, the Regions or the States are initiating enforcement actions, including corrective action orders, when appropriate. Inspection and enforcement resources are being provided to continue support of the permit program. The Regions are also assessing financial penalties in conjunction with administrative orders.

As part of the Agency's effort to evaluate State programs, the Regions are conducting oversight inspections with State personnel and are reviewing the compliance monitoring and enforcement programs in all authorized and Cooperative Arrangement States. In addition, the Agency is supporting State enforcement actions by providing technical support, such as expert witnesses, sampling and laboratory analysis, and other technical expertise not generally available in State agencies.

1985 Accomplishments

In 1985, the Agency obligated $9,486,600 supported by 219.7 total workyears of which $7,834,300 was for the Salaries and Expenses appropriation and $1,652,300 was for the Abatement, Control, and Compliance appropriation.

The Agency made progress in providing a visible and effective enforcement presence within the regulated community. The Agency or the States conducted compliance monitoring inspections at nearly all of the designated major handlers which included all land disposal facilities. The Agency conducted over 1500 compliance or oversight inspections of major and non-major handlers and over 850 record reviews of closure plans or financial instruments. To return violators to compliance, the Agency issued warning letters and administrative orders with penalties. Civil referrals and criminal investigations were initiated where stronger enforcement actions were appropriate.

In its State oversight role, the Agency conducted oversight inspections to evaluate the quality of State facility inspections as well as to train State inspectors. In addition, the Regions provided technical support and assistance to States conducting compliance monitoring and enforcement activities.

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PESTICIDES

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$36,767.3	$38,105.7	$37,522.5	-$1,613.6	$35,908.9	$37,766.1	$1,857.2
Abatement Control and Compliance	$28,929.6	$25,453.1	$25,453.1	-$1,094.4	$24,358.7	$23,953.1	-$405.6
Research & Development	$4,824.6	$6,948.1	$6,860.9	-$294.9	$6.566.0	$7,713.9	$1,147.9
TOTAL, Pesticides	$70,521.5	$70,506.9	$69,836.5	-$3,002.9	$66,833.6	$69,433.1	$2,599.5
PERMANENT WORKYEARS	734.6	735.1	741.2		741.2	734.7	-6.5
TOTAL WORKYEARS	797.5	809.1	807.6		807.6	803.8	-3.8
OUTLAYS	$61,155.0	$57,560.2	$67,142.7	-$1,947.5	$65,195.2	$68,720.5	$3,525.3
AUTHORIZATION LEVELS	Authorization for the Federal Insecticide, Fungicide, and Rodenticide Act expires September 30 1986. Reauthorization is pending.						

PESTICIDES

OVERVIEW AND STRATEGY

As a class, pesticides are among the most beneficial and the most hazardous of substances. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, and Sections 402, 406, 408, and 409 of the Federal Food, Drug, and Cosmetic Act (FFDCA) give the Environmental Protection Agency authority to regulate the distribution and use of pesticides in the United States. The Agency is thereby charged with a regulatory task of enormous scope and complexity. An estimated 2.7 billion pounds of pesticide active ingredients are used annually in this country, representing over 50,000 products. These products provide benefits to society by substantially contributing to agricultural productivity and controlling human disease vectors such as mosquitoes. At the same time, pesticides are inherently hazardous in that they are specifically formulated to be injurious to living target organisms and are deliberately introduced into the environment for this purpose. The hazards presented by pesticides are thus intrinsic to their use. While many pesticides are available for use only by trained pest control operators and farmers, many others are used by persons who have no special expertise in the use of these products. Furthermore, many pesticides are used on food or animal feed crops so that human dietary exposure cannot be avoided, although it can be controlled by regulatory measures.

Under FIFRA and the FFDCA, the Agency is responsible for ensuring that pesticides perform their intended functions without unreasonable adverse effects on public health and the environment. The 1987 pesticides program strategically builds on accomplishments achieved by EPA in previous years and reflects a continued commitment to fulfill the congressional mandate. Achieving the statutory goal of balancing health and environmental protection with economic stability and growth requires regulatory operations within EPA that are flexible, efficient, and effective. It also requires ongoing, close, and free dialogue with pesticide users, public interest groups, and the regulated industry. In addition, the Agency intends to encourage increased involvement by State and local governments in regulatory matters, especially in connection with local pest control needs and emergencies, the enforcement of regulations, and the education and training of persons such as applicators and farmworkers who are particularly likely to be exposed to pesticides.

The Agency's 1987 pesticide regulation strategy focuses on four broad program areas: 1) registration of new products, 2) review and reregistration of existing products, 3) enforcement of pesticide use rules, and 4) research and development to support and improve EPA's ability to evaluate the risks and benefits of pesticides. A shift in program emphasis from the review of new pesticide products to the reregistration of existing pesticides, begun in 1985, will continue in 1987.

Registration Activities

FIFRA and FFDCA authorize EPA to set the terms and conditions of pesticide registration, marketing, and use. The purpose of Federal registration of pesticides by EPA is to protect public health and the environment from unreasonable risks while allowing users the benefits of needed pesticides. The Registration program focuses on registering new pesticide products on the basis of data reviewed by Agency scientists and amending current registrations to add new uses and/or new formulations. The Agency will continue to give priority to applications for New Chemicals and New Uses.

The Special Registration program will continue to perform an auxiliary function by permitting certain unregistered pesticide uses for experimental purposes and emergency pest situations. It also provides oversight and guidance to State Registration and Experimental Use Permit programs. The Tolerance program establishes safe and enforceable tolerance levels (or in some instances exemptions from tolerance requirements) for pesticide residues in or on raw agriculture commodities and processed foods. Tolerances (maximum permissible residue levels) are set for both active and inert pesticide ingredients.

The Agency will continue a program of field and laboratory studies on the efficacy of current protective clothing technology as a means of reducing exposure. This activity will build upon previous investigations of protective clothing, develop options for a regulatory strategy, and propose ways to increase the use of protective clothing. This is a critical area since requiring protective clothing is a key strategy in reducing exposure to an acceptable level.

Generic Chemical Review and Reregistration

In 1987, the Agency will continue to place emphasis on evaluating the potential hazards posed by existing pesticides. The registrations of the majority of existing pesticide chemicals are supported by data bases which the Agency has found insufficient, by today's standards, to determine unreasonable adverse effects. The Generic Chemical Review program is designed to remedy this problem by reviewing current knowledge about each chemical, requiring that scientific data base supporting registrations be upgraded, and establishing scientifically based regulatory standards for the reregistration of existing products and the registration of future products. Three major activities support this program:

(1) Data Call-In requires registrants to supply data to fill gaps in the current registration data base. It is designed to increase the likelihood that critical data will be available in time for standards development and/or to aid the Agency in identifying pesticides posing potentially unreasonable adverse effects.

(2) Registration Standards are established on the basis of a thorough review of available information on existing pesticides. They explain the Agency's regulatory position on the use of active ingredients common to large numbers of pesticide products. Standards provide the basis for the reregistration of existing products and for the registration of new products containing currently registered active ingredients. Registration Standards will also be developed for some new active ingredients.

(3) Special Review is a formal process by which pesticides suspected of causing unreasonable adverse effects are subjected to intensive risk/benefit analyses and appropriate regulatory action, such as restricting or prohibiting specific uses of a pesticide, is taken.

Pesticides Enforcement

Pesticides enforcement and applicator certification and training activities are undertaken primarily by the States and Territories operating under cooperative agreement programs. Participating States and Territories conduct use observations, inspect pesticide-producing establishments, and conduct marketplace surveillance. The States and Territories also operate training and certification programs for applicators of restricted-use pesticides. The Pesticides enforcement grants will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs.

Research and Development

The Pesticides Research and Development budget request contains increases in several areas. Resources in environmental processes and effects are increased to investigate the hazards associated with genetically engineered pesticides. Research on health effects will be augmented to develop methodologies for exposure estimation and validation of subpart M of the "Part 158" regulatory guidelines, which specify procedures for registering genetically engineered pesticides. Engineering support will also be increased to evaluate the effectiveness of protective apparel. In the other areas, research will continue to develop health and environmental test methods in support of FIFRA test guidelines and to examine extrapolation, dosimetry, and biological markers. Finally, efforts will be continued in developing environmental risk assessment methods as well as quality assurance, pesticides repository services, and risk and exposure assessments.

PESTICIDES

Program Activities	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
Incremental Outputs					
Special Review Decisions ...	11	13	13	13	---
New Chemical and Biochemical/ Microbial Agent Reviews ...	354	330	330	330	---
Old Chemical Reviews	4,209	5,200	4,650	4,650	---
Amended Registration Reviews	9,749	8,000	10,000	10,000	---
New Use Reviews	349	300	300	300	---
Emergency Exemption Reviews	242	500	250	250	---
Experimental Use Permit Reviews	480	400	400	400	---
24(c) State Registration Reviews	764	775	475	475	---
Temporary Tolerance Petition Reviews	147	150	150	150	---
Tolerance Petition Reviews	596	475	475	475	---
Inert Ingredient Reviews	159	60	60	60	---
Producer Establishment Inspections a/.............	2,140	2,400	2,300	2,070	-230
Use/Reentry and Experimental Use Observations a/........	15,020	21,200	19,000	18,000	-1,000
Marketplace Investigations a/..........	11,083	8,000	6,000	4,000	-2,000
Import Inspections a/.......	605	700	700	630	-70
State Applicator License and Record Inspections	12,760	11,100	11,000	10,000	-1,100
State Dealer Record Inspections	9,526	9,000	9,000	8,100	-900
Federal Laboratory Inspections	86	25	25	25	---
Test Study Audits	291	65	95	95	---
Notices of Violation a/	5,566	4,656	5,220	4,635	-585
Administrative Orders a/ ...	571	352	535	475	-60
Civil Litigations a/	---	---	---	---	---
Criminal Litigations a/	186	175	175	155	-20
Cumulative Outputs					
Registration Standard Guidance Packages Established	117	140	142	167	+25
CORT Data Call-In b/ Requirements (Chemicals)...	416	---	---	---	---
Review of Incoming Studies on Existing Chemicals	439	940	909	1,379	+470

a/ Includes both Federal and State enforcement activities

b/ (Chronic feeding, oncogenicity, reproduction, and teratogenicity) Program complete in 1985

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PESTICIDES

Pesticides Research

(DOLLARS IN THOUSANDS)

PROGRAM	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Scientific Assessment - Pesticides							
Salaries & Expenses	$396.2	$432.7	$432.7	-$18.5	$414.2	$403.8	-$10.4
Research & Development	$24.0	$374.7	$345.3	-$14.8	$330.5	$372.0	$41.5
TOTAL	$420.2	$807.4	$778.0	-$33.3	$744.7	$775.8	$31.1
Monitoring Systems & Quality Assurance - Pesticides							
Salaries & Expenses	$318.1	$415.2	$415.2	-$17.9	$397.3	$415.2	$17.9
Research & Development	$1,509.4	$1,223.4	$1,111.9	-$47.8	$1,064.1	$1,090.9	$26.8
TOTAL	$1,827.5	$1,638.6	$1,527.1	-$65.7	$1,461.4	$1,506.1	$44.7
Health Effects - Pesticides							
Salaries & Expenses	$1,798.4	$1,860.2	$1,854.2	-$79.7	$1,774.5	$1,976.0	$201.5
Research & Development	$2,309.8	$2,239.8	$2,093.7	-$90.0	$2,003.7	$1,998.0	-$5.7
TOTAL	$4,108.2	$4,100.0	$3,947.9	-$169.7	$3,778.2	$3,974.0	$195.8
Environmental Engineering And Technology - Pesticides							
Salaries & Expenses	$31.1	$61.6	$55.7	-$2.3	$53.4	$55.7	$2.3
Research & Development	$398.2	$925.0	$823.9	-$35.4	$788.5	$925.0	$136.5
TOTAL	$429.3	$986.6	$879.6	-$37.7	$841.9	$980.7	$138.8
Environmental Processes & Effects - Pesticides							
Salaries & Expenses	$2,296.3	$2,719.1	$2,716.7	-$116.9	$2,599.8	$2,655.3	$55.5
Research & Development	$583.2	$2,185.2	$2,486.1	-$106.9	$2,379.2	$3,328.0	$948.8
TOTAL	$2,879.5	$4,904.3	$5,202.8	-$223.8	$4,979.0	$5,983.3	$1,004.3

PESTICIDES

Pesticides Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Salaries & Expenses	$4,840.1	$5,488.8	$5,474.5	-$235.3	$5,239.2	$5,506.0	$266.8
Research & Development	$4,824.6	$6,948.1	$6,860.9	-$294.9	$6,566.0	$7,713.9	$1,147.9
Pesticides Research TOTAL	$9,664.7	$12,436.9	$12,335.4	-$530.2	$11,805.2	$13,219.9	$1,414.7
PERMANENT WORKYEARS							
Scientific Assessment - Pesticides	7.3	7.7	5.7		5.7	5.7	
Monitoring Systems & Quality Assurance - Pesticides	4.2	6.4	6.4		6.4	6.4	
Health Effects - Pesticides	27.4	29.0	38.2		38.2	32.2	-6.0
Environmental Engineering And Technology - Pesticides	.1						
Environmental Processes & Effects - Pesticides	41.3	42.3	43.0		43.0	46.0	3.0
TOTAL PERMANENT WORKYEARS	80.3	85.4	93.3		93.3	90.3	-3.0

PESTICIDES

Pesticides Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Scientific Assessment - Pesticides	7.3	7.7	7.7		7.7	7.7	
Monitoring Systems & Quality Assurance - Pesticides	4.5	7.5	7.5		7.5	7.5	
Health Effects - Pesticides	33.2	38.2	38.2		38.2	38.2	
Environmental Engineering And Technology - Pesticides	.6	1.0	1.0		1.0	1.0	
Environmental Processes & Effects - Pesticides	53.4	55.3	55.3		55.3	55.3	
TOTAL WORKYEARS	99.0	109.7	109.7		109.7	109.7	

PESTICIDES

Pesticides Research

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Develop and Validate Test Methods for FIFRA Studies

- Final Report: Methods to Detect Adverse Effects on Sperm Production and Function (Sci. Assessment)
- Final Report: Methods Manual for Spawning, Culturing and Testing Antherinid Fishes (Env. Processes)
- Report describing validated test protocol to detect and characterize neurotoxicity (Health)

Objective 3: Perform Ecological Research Including Transport, Fate and Field Validation

- Journal Article: Results of Field Testing of Pesticide Root Zone Model (PRZM) and Pesticide Analytical Solution (PESTANS) Leaching Models for Coastal Plain Soils (Env. Processes)

Objective 4: Perform Engineering Research in Support of FIFRA

- Interim Guidance Manual for Selecting Protective Clothing for Agricultural Pesticide Operations (Engineering)

Objective 5: Perform Exposure Monitoring Research

- Final Report on the Pesticide Total Exposure Assessment Methodology (TEAM) Study (Monitoring)

Objective 6: Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents

- Report on laboratory testing and evaluation of selected MPCAs on non-target (terrestrial) arthropods (Env. Processes)

Objective 8: Provide Support Services for FIFRA Studies

- Annual Report on Data Comparison Program for Pesticides (Monitoring)
- Revised Manual for Analytical Methods for Tissue and Environmental Samples (Monitoring)

1986 PLANNED OUTPUTS

Objective 1: Develop and Validate Test Methods for FIFRA Studies

- Report on desirable sample sizes for use in soil contamination studies (Sci. Assessment)
- Report on genetically altered viruses in the environment (Sci. Assessment)
- Report: Handbook of Acute Toxicity of Chemicals to Estuarine Organisms (Env. Processes)

Objective 2: Perform Health Research on Biological Markers, Dosimetry and Extrapolation

o Report describing how to use a newly developed technique to evaluate risk of heritable gene mutation (Health)

Objective 3: Perform Ecological Research Including Transport, Fate and Field Validation

o Dougherty Plain Annual Project Report (Env. Processes)

Objective 5: Perform Exposure Monitoring Research

o Report on data assessment of the TEAM Field Study (Monitoring)

Objective 6: Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents

o Report characterizing cytolytic factors of the microbial and biochemical pest control agents (Health)

Objective 8: Provide Support Services for FIFRA Studies

o Risk assessments on aldrin, dieldrin, chlordane and heptachlor (Sci. Assessment)
o Reproductive and developmental toxicity assessment of cadmium (Sci. Assessment)

1985 ACTUAL OUTPUTS

Objective 1: Develop and Validate Test Methods for FIFRA Studies

o Report on the effects of endrin on water fowl and upland game birds in grain fields (Env. Processes)
o Report on biotechnology risk assessment (Sci. Assessment)

Objective 2: Perform Health Research on Biological Markers, Dosimetry and Extrapolation

o Report on the neurotoxic potential of pesticides: age related effects of pesticides relevant to youth in agriculture (Health)

Objective 3: Perform Ecological Research Including Transport, Fate and Field Validation

o (Prototype) Manual - Design Requirements for Conducting Field Level Pesticides Run-off Studies (Env. Processes)
o Report: Factors Affecting Biodegradation of Fenthionin Salt Marsh Environments (Env. Processes)

Objective 4: Perform Engineering Research in Support of FIFRA

o Proceedings of the Research Workshop on the Treatment/Disposal of Pesticide Wastewater Generated by the Agricultural Application of Pesticides (Engineering)

Objective 5: Perform Exposure Monitoring Research

o Status report and data assessment of the TEAM Field Study (Monitoring)

Objective 8: Provide Support Services for FIFRA Studies

o Epidemiology study protocol for creosote (Sci. Assessment)

PESTICIDES

Pesticides Research

Budget Request

The Agency requests a total of $13,219,900 supported by 109.7 total workyears for 1987, an increase of $1,414,700 and no change in total workyears from 1986. Of the request, $5,506,000 will be for the Salaries and Expenses appropriation and $7,713,900 will be for the Research and Development appropriation, increases of $266,800 and $1,147,900, respectively.

Program Description

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Federal Food, Drug and Cosmetics Act (FFDCA) require the regulation of pesticide use to avoid unreasonable adverse effects to public health and to the environment. The research program improves our understanding of how pesticides interact with human activities and the environment, to assure that their use minimizes damage from pests, while maximizing the protection of human food, health and the environment.

Objective 1: Develop and Validate Test Methods for FIFRA Studies. This activity develops and validates environmental and health test methods for use by industry. Research under this objective is needed to develop valid test protocols to meet pesticide registration requirements and enforcement responsibilities under Sections 3 and 26 of FIFRA.

Objective 2: Perform Health Research on Biological Markers, Dosimetry and Extrapolation. This research effort develops methods for extrapolating from high to low doses between mammalian species and to define the relationships between biochemical indicators of exposure to neurotoxicants and behavioral dysfunctions.

Objective 3: Perform Ecological Research Including Transport, Fate and Field Validation. This field validation effort quantifies pesticide effects through censusing and field tests to evaluate mortality, reproduction and recovery potential of fishes, invertebrates, birds and other organisms. The field research is supported and enhanced by detailed laboratory studies and analysis.

Objective 4: Perform Engineering Research in Support of FIFRA. This research effort provides information on protective clothing and equipment for pesticide loaders, mixers, and applicators to meet the Office of Pesticide Programs' (OPP) regulatory needs under FIFRA. Classes of pesticides, formulation types and concentration, types of protective clothing and equipment, and test methods are identified, prioritized, and evaluated.

Objective 5: Perform Exposure Monitoring Research. This effort provides monitoring expertise, equipment, and staff for the development of specialized monitoring protocols and methodology for total human exposure monitoring for pesticides as well as the means to characterize sources and routes of exposure for national pesticide monitoring efforts.

Objective 6: Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. This effort provides for the evaluation of the effects of microbial and biochemical pest control agents (MBPCAs) and products of biotechnology on humans and the environment. Such methods and data are necessary to support registration activities of OPP.

Objective 7: Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols. This effort provides the means to determine the risk posed to actual ecosystems by environmental pollutants.

Objective 8: Provide Support Services for FIFRA Activities. These efforts provide support for risk and exposure assessment as well as quality assurance and pesticides repository services.

SCIENTIFIC ASSESSMENT

1987 Program Request

The Agency requests a total of $775,800 supported by 7.7 total workyears for this program, of which $403,800 will be for the Salaries and Expenses appropriation and $372,000 will be for the Research and Development appropriation. This represents a decrease of $10,400 and an increase of $41,500, respectively, and no change in total workyears. This reflects a shift of resources to provide for extramurally funded literature searches for developing assessment methods.

Develop and Validate Test Methods for FIFRA Studies. The 1987 scientific assessment program will continue the development of methods to determine reproductive dysfunction as well as pesticide-specific assessment methods for exposure and health risks from cancer and mutagenicity. Further efforts will examine chemical dose rate effects on damage to DNA and mutagenic responses.

Provide Support Services for FIFRA Activities. The scientific assessment program will continue to prepare health risk assessments for cancer, mutagenicity, adverse reproductive/developmental effects and exposure. Additional efforts will also provide for review of and/or consultation on program office assessments.

1986 Program

In 1986, the Agency is allocating a total of $744,700 supported by 7.7 total workyears for this program, of which $414,200 is from the Salaries and Expenses appropriation and $330,500 is from the Research and Development appropriation. The 1986 program is continuing the development of exposure risk assessment methods as well as preparation of health risk assessments and review of program office assessments.

1985 Accomplishments

In 1985, the Agency obligated a total of $420,200 supported by 7.3 total workyears for this program, of which $396,200 was from the Salaries and Expenses appropriation and $24,000 was from the Research and Development appropriation. In 1985, risk assessments were performed for dicofol and metalaxyl. Data evaluation reports were prepared for captan, linuron and lindane. An epidemiology study protocol was developed for creosote.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Program Request

The Agency requests a total of $1,506,100 supported by 7.5 total workyears for this program, of which $415,200 will be for the Salaries and Expenses appropriation and $1,090,900 will be for the Research and Development appropriation. This represents increases of $17,900 and $26,800, respectively, and no change in total workyears. These increases reflect adjustments to the 1986 base as part of government-wide deficit reductions.

Perform Exposure Monitoring Research. This research will be designed to develop methods of measurement for pesticides. The methods will be used to provide data on actual human exposure to individual pesticides. The Total Exposure Assessment Methodology (TEAM) approach will support increased reliance upon such personal exposure monitoring.

Provide Support Services for FIFRA Activities. The 1987 monitoring and quality assurance efforts will continue to operate the pesticide and industrial chemical repository of over 1,400 chemicals. The repository annually distributes over 30,000 standard samples to the user community. Quality assurance support will also continue to OPP contract laboratories as well as lab intercomparison studies and distribution of unknown samples to evaluate OPP laboratories.

1986 Program

In 1986, the Agency is allocating a total of $1,461,400 supported by 7.5 total workyears for this program, of which $397,300 is from the Salaries and Expenses appropriation and $1,064,100 is from the Research and Development appropriation. The 1986 program is continuing support for exposure monitoring research, quality assurance and repository services.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,827,500 supported by 4.5 total workyears for this program, of which $318,100 was from the Salaries and Expenses appropriation and $1,509,400 was from the Research and Development appropriation. In 1985, an annual report on the data comparison program for pesticides was prepared. Also, a status report was prepared on data assessment of the Total Exposure Assessment Methodology (TEAM) field study.

HEALTH EFFECTS

1987 Program Request

The Agency requests a total of $3,974,000 supported by 38.2 total workyears for this program, of which $1,976,000 will be for the Salaries and Expenses appropriation and $1,998,000 will be for the Research and Development appropriation. This represents an increase of $201,500 and a decrease of $5,700, respectively, and no change in total workyears. This reflects a shift of resources to provide for procurement of equipment necessary for biotechnology research and test development.

Develop and Validate Test Methods for FIFRA Studies. Health effects efforts will develop and refine bioassays for the detection of adverse developmental and reproductive effects. Also, techniques will be developed, validated, refined and implemented for determining genetic effects caused by human exposure to chemical carcinogens and mutagens. Finally, methods will be developed to define the relationship between biological indicators or neurotoxicity and disease.

Perform Health Research on Biological Markers, Dosimetry and Extrapolation. Health research will focus on the development of animal models for assessing health risks caused by pesticides as well as development of a data management system with the capability to store and analyze research information on genetic and related toxicants. This system will be used in the estimation of hazard to humans from potential carcinogens and mutagens.

Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. Health research in this area will provide methods for detecting, identifying and monitoring biological pesticide agents in mammalian cells as a basis for test protocols to support microbial pesticide registration. Efforts will also be undertaken to evaluate subpart M testing guidelines for microbial pest control agents.

1986 Program

In 1986, the Agency is allocating a total of $3,778,200 supported by 38.2 total workyears for this program, of which $1,774,500 is from the Salaries and Expenses appropriation and $2,003,700 is from the Research and Development appropriation. The 1986 program continues to provide data on the effects of microbial and biochemical pest control agents, to develop test methods in support of FIFRA test guidelines and to perform research on biological markers extrapolation from high to low doses.

1985 Accomplishments

In 1985, the Agency obligated a total of $4,108,200 supported by 33.2 total workyears for this program, of which $1,798,400 was from the Salaries and Expenses appropriation and $2,309,800 was from the Research and Development appropriation. In 1985, journal articles were prepared on the neurotoxic potential of pesticides as well as a preliminary screen for skin penetration of 14 pesticides.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $980,700 supported by 1.0 total workyear for this program, of which $55,700 will be for the Salaries and Expenses appropriation and $925,000 will be for the Research and Development appropriation. This represents increases of $2,300 and $136,500, respectively, and no change in total workyears. These increases reflect the acceleration of efforts to test protective garments worn by pesticide mixers, loaders and applicators.

Perform Engineering Research in Support of FIFRA. This effort will focus on the evaluation of selected protective garments for pesticide applicators and formulators. Expanded research in this area will evaluate the breakthrough time and steady-state permeation rate data on concentrated formulations of highly toxic pesticides. This research will provide engineering information on pesticide protective apparel used in application and formulation.

1986 Program

In 1986, the Agency is allocating a total of $841,900 supported by 1.0 total workyear for this program, of which $53,400 is from the Salaries and Expenses appropriation and $788,500 is from the Research and Development appropriation. Engineering research activities in 1986 are continuing to provide information on the effectiveness of protective garments for pesticide mixers, loaders and applicators.

1985 Accomplishments

In 1985, the Agency obligated a total of $429,300 supported by 0.6 total workyear for this program, of which $31,100 was from the Salaries and Expenses appropriation and $398,200 was from the Research and Development appropriation. In 1985, a report was prepared on the proceedings of the research workshop on the treatment and disposal of pesticide wastewater generated by the agricultural application of pesticides.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests a total of $5,983,300 supported by 55.3 total workyears for this program, of which $2,655,300 will be for the Salaries and Expenses appropriation and $3,328,000 will be for the Research and Development appropriation. This represents increases of $55,500 and $948,800, respectively, and no change in total workyears. These increases will provide for new efforts to determine the effects of genetically engineered pesticides, and to evaluate the effects of pesticide use on groundwater.

Develop and Validate Test Methods for FIFRA Studies. Environmental processes and effects efforts will focus on developing and validating bioassays and other methodologies for use as standardized testing protocols and for use in determining the effects of chemical pesticides on marine and freshwater animals. In this area, methods will be devised for culturing and testing marine and freshwater animals; techniques will be studied to determine the effects of sediment-water interactions of high use pesticides; and testing methods and protocols will be provided. This provides testing methods which the Agency can recommend for use by pesticide manufacturers.

Perform Ecological Research Including Transport, Fate and Field Validation. Research in this area will concentrate on the development, refinement and validation of techniques and models to predict pesticide transport, degradation and fate, as well as exposure estimates of pesticides through surface and subsurface matrices. Additionally, field and laboratory studies will be conducted to determine if laboratory methodologies and results are valid and reflect environmental responses under natural conditions. New efforts will determine the environmental impact to groundwater caused by pesticide use and other agricultural practices. Pesticide processes in soils and ground water will be characterized, information will be developed on spatial variability in subsurface cores, and a report will be produced on best management practices that could mitigate groundwater contamination by pesticides.

Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. Environmental processes and effects research will focus on developing and improving testing protocols for unaltered Microbial Pest Control Agents (MPCAs) and genetically altered Biological Control Agents (BCAs) on non-target receptors. Studies will be initiated to field verify initial results and to ensure reproducible predictions. Research results will supply testing protocols for subpart M guidelines used by industry to provide data on which regulatory actions are based.

Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols. Research in this area will continue to develop methodologies to predict risk to ecosystems. Activities include development of risk assessment methodology for pesticides by combining exposure and hazard data via transport, fate and effects models, determination of validity of model results in expressing estimates of risk of important populations, determination of important endpoint responses and population changes and identification of how ecosystem structure and function alterations affect risk analysis. Other critical activities will include determining the impact of pesticide use on beneficial organisms and preparation of habitat maps of endangered species and associated pesticide hazards. Such assessments are used in determining if a pesticide should be registered, how it should be used, and what its potential risks are.

1986 Program

In 1986, the Agency is allocating a total of $4,979,000 supported by 55.3 total workyears for this program, of which $2,599,800 is from the Salaries and Expenses appropriation and $2,379,200 is from the Research and Development appropriation. The 1986 program continues to develop test methods in support of FIFRA guidelines, perform research on transport, fate and field validation, and determine the effects of biological pest control agents. New efforts are being initiated to determine risk to actual ecosystems from pesticides.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,879,500 supported by 53.4 total workyears for this program, of which $2,296,300 was from the Salaries and Expenses appropriation and $583,200 was from the Research and Development appropriation. In 1985, reports were completed on the effects of endrin on water fowl and upland game birds as well as on factors affecting biodegradation of fentheon in salt marsh environments. Field level pesticide studies were also conducted.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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PESTICIDES

Registration, Special Registration & Tolerances

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Registration								
Salaries & Expenses		$10,129.4	$10,377.7	$10,042.2	-$431.9	$9,610.3	$10,310.4	$700.1
Abatement Control and Compliance		$4,665.4	$3,600.0	$3,600.0	-$154.8	$3,445.2	$3,200.0	-$245.2
	TOTAL	$14,794.8	$13,977.7	$13,642.2	-$586.7	$13,055.5	$13,510.4	$454.9
Special Registration								
Salaries & Expenses		$2,087.1	$2,042.4	$1,566.6	-$67.4	$1,499.2	$1,487.7	-$11.5
	TOTAL	$2,087.1	$2,042.4	$1,566.6	-$67.4	$1,499.2	$1,487.7	-$11.5
Tolerances								
Salaries & Expenses		$3,131.4	$2,955.1	$2,905.1	-$125.0	$2,780.1	$2,902.2	$122.1
	TOTAL	$3,131.4	$2,955.1	$2,905.1	-$125.0	$2,780.1	$2,902.2	$122.1
TOTAL:								
Salaries & Expenses		$15,347.9	$15,375.2	$14,513.9	-$624.3	$13,889.6	$14,700.3	$810.7
Abatement Control and Compliance		$4,665.4	$3,600.0	$3,600.0	-$154.8	$3,445.2	$3,200.0	-$245.2
Registration, Special Registration & Tolerances	TOTAL	$20,013.3	$18,975.2	$18,113.9	-$779.1	$17,334.8	$17,900.3	$565.5
PERMANENT WORKYEARS								
Registration		206.2	196.2	191.5		191.5	191.5	
Special Registration		43.1	39.4	29.7		29.7	27.8	-1.9
Tolerances		75.2	68.7	68.7		68.7	68.1	-.6
TOTAL PERMANENT WORKYEARS		324.5	304.3	289.9		289.9	287.4	-2.5

PESTICIDES

Registration, Special Registration & Tolerances

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1997 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Registration	217.9	212.3	207.3		207.3	207.3	
Special Registration	45.0	42.3	31.9		31.9	29.9	-2.0
Tolerances	78.5	73.8	73.8		73.8	73.1	-.7
TOTAL WORKYEARS	341.4	328.4	313.0		313.0	310.3	-2.7

PESTICIDES

Registration, Special Registration, and Tolerances

Budget Request

The Agency requests a total of $17,900,300 supported by 310.3 total workyears for 1987, an increase of $565,500 and a decrease of 2.7 total workyears from 1986. Of the request, $14,700,300 will be for the Salaries and Expenses appropriation and $3,200,000 will be for the Abatement, Control and Compliance appropriation, an increase of $810,700 and a decrease of $245,200, respectively.

Program Description

The Agency evaluates all proposed pesticides under a "no unreasonable adverse effects" standard, taking into account the economic, social, and environmental risks and benefits of the use of any pesticide. The overall goal of these activities is to facilitate a steady flow of environmentally acceptable products to the marketplace. These activities are authorized by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), which requires that a pesticide be registered by EPA before it can be legally sold, distributed, or made available for use, and the Federal, Food, Drug and Cosmetic Act (FFDCA), which requires the establishment of safe pesticide residue levels on food and feed. This subactivity includes three program areas:

Registration -- Under this program new pesticide products are registered and current registrations are amended to add uses and/or new formulations. Registration is accomplished by: 1) reviewing formulation and use data to ensure that product use will not result in "unreasonable adverse effects"; and 2) limiting the risks associated with use through label precautions, special packaging requirements, application directions, and, where necessary, restriction of use to trained applicators.

Special Registration -- The purpose of this program is to respond to requests for experimental use permits and emergency exemptions (permitting the use of unregistered pesticides or the use of registered pesticides for sites/pests not included in their registration to meet pest emergencies). The program also reviews State registrations of pesticides for Special Local Needs and related State plans. These functions are required by Sections 5, 18, and 24 of FIFRA.

Tolerances -- The goal of this program is to protect the public health while giving appropriate consideration to the production of an adequate, wholesome, and economical food supply. This goal is achieved by establishing tolerance levels for residues of both active and inert pesticide ingredients (or exemption from the requirements of a tolerance) in or on raw agriculture commodities and processed foods, establishing safe residue levels (temporary tolerances) for food or feed crops to be marketed following the application of experimental use pesticides, and ensuring, through the testing of analytical methods, that established tolerances can be adequately enforced.

REGISTRATION

1987 Program Request

The Agency requests a total of $13,510,400 supported by 207.3 total workyears for this program, of which $10,310,400 will be for the Salaries and Expenses appropriation and $3,200,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $700,100 and a decrease of $245,200, respectively, and no change in total workyears. The overall increase represents increased support for New Chemicals and New Uses to permit a more rapid entry of new, potentially safer, chemicals into the marketplace.

In 1987, the Agency expects to conduct 330 reviews of new chemicals and biochemical/microbial agents, 4,650 reviews of old chemicals, 10,000 amended registration reviews, and 300 new use reviews. This is essentially the same level of reviews expected in 1986.

The Agency will continue to give priority to applications for new chemicals and new uses (especially the first food use of non-food use pesticides). Continued attention will be given to biochemical/microbial agents, including genetically altered products, in order to determine the scope of any required regulatory amendments and necessary interagency coordination for the effective regulation of such products. Emphasis will continue to be placed on reviewing data in support of food-use chemicals, feedthroughs, aquatic pesticides used in potable water, and other product classes of special concern.

Initiatives begun in 1986 and continuing in 1987 include more stringent requirements for conditional registrations; further development of Standard Evaluation Procedures to help ensure uniformity of science reviews and public understanding of review processes; the automated integration of EPA records of scientific studies, reviews, product information and other data; evaluation of potential groundwater contamination; and work on region-specific priority projects such as geographic-specific groundwater problems, the role of individual regions in monitoring systems, and the use of 1080 on prairie dogs. The efficacy of protective clothing will be considered so that better risk management decisions can be made and promulgated through label requirements. Worker Protection Standards are expected to be promulgated in 1987 as a result of negotiated rulemaking efforts in 1986.

The Agency plans to implement registration fees in 1987 to begin recovery of Agency costs for pesticide registration. Any fees collected would not affect the need for appropriated funds in 1987.

1986 Program

In 1986, the Agency is allocating a total of $13,055,500 supported by 207.3 total workyears for this program, of which $9,610,300 is from the Salaries and Expenses appropriation and $3,445,200 is from the Abatement, Control and Compliance appropriation.

Increased emphasis is being given to the groundwater contamination initiative in 1986 by imposing monitoring requirements on registrants, routinely assessing contamination potential through extensive review of environmental fate test data, and preventing or minimizing groundwater contamination through cancellation, geographical restriction, or restricted-use classifications.

Worker Protection Standards and procedures governing worker protection requirements, including pesticide-treated field reentry periods, protective clothing, and label warnings, are the subject of regulatory negotiation and proposal in 1986. The Agency is also highlighting and working on problems identified by the regions, such as geographically specific groundwater problems and the use of 1080 on prairie dogs.

The quality and speed of decision-making continues to be improved through Standard Evaluation Procedures (SEPs). The enhancement of the automation and management of the pesticides data base is improving the Agency's ability to identify data gaps and to prevent unanticipated adverse environmental impacts by bringing all available information to bear on regulatory decisions.

Registration fees may be proposed in 1986 to begin recovery of Agency processing costs.

1985 Accomplishments

In 1985, the Agency obligated a total of $14,794,800 supported by 217.9 total workyears, of which $10,129,400 was from the Salaries and Expenses appropriation and $4,665,400 was from the Abatement, Control and Compliance appropriation.

In 1985, increased emphasis was placed on new chemical and new use applications resulting in output increases, over the 1985 estimate, of 7 percent and 16 percent respectively. Improvements were made in the quality and speed of decision-making through the establishment of Standard Evaluation Procedures (SEPs), the continued development of an integrated pesticide data base, and publication of Data Requirements for Registration and revised procedures for Data Support Requirements under FIFRA. These regulations have helped the decision-making process by providing a clear statement of registration requirements and reducing the uncertainty, paperwork, and review cycles associated with clarifying routine requirements with registrants.

SPECIAL REGISTRATION

1987 Program Request

The Agency requests a total of $1,487,700 supported by 29.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $11,500 and 2.0 total workyears. The decrease reflects an anticipated decrease in state and local needs reviews.

In 1987, State participation in Emergency Exemption, Experimental Use Permit, and Special Local Needs programs will continue to be enhanced through EPA guidance and close Federal/State cooperation. EPA will continue to monitor State actions in the Emergency Exemption and Special Local Needs registration programs to assure proper use of these provisions. The Agency will focus on the critical health and safety effects of emergency exemption requests. Experimental use permits (EUPs) will continue to be issued when appropriate to allow for experimentation with nonregistered products or uses to develop data needed for registration. A total of 400 EUP reviews is expected. Rapid communication with affected parties, States, and other measures will be continued to minimize processing times and backlogs. In 1987, 250 emergency exemption reviews and 475 State and local needs reviews are projected to be completed.

1986 Program

In 1986, the Agency is allocating a total of $1,499,200 supported by 31.9 total workyears for this program, all of which is from the Salaries and Expenses appropriation.

In 1986, the Agency is issuing final revisions to regulations concerning Section 18 emergency exemptions under which criteria for granting exemptions will become more stringent in order to effectively assure their validity. The Agency has recently implemented a policy concerning genetically engineered, microbial pesticides (GEMPs) requiring notification of the Agency of intended small-scale field testing, and a 90-day period for the Agency to determine whether an EUP is required. The first experimental use permits for GEMPs were granted in November, 1985 for small field testing of altered bacteria to prevent frost damage to plants.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,087,100 supported by 45.0 total workyears, all of which was from the Salaries and Expenses appropriation.

Temporary tolerance petition review activities and associated resources were moved to the Tolerance program beginning in 1985. The purpose was to consolidate all tolerance setting and tolerance fee-related activities in the same program. Accomplishments in 1985 included the publication of the proposed revised rule developed through regulatory negotiation for Section 18 exemptions and work on establishing the Agency's policy on GEMPs.

TOLERANCES

1987 Program Request

The Agency requests a total of $2,902,200 supported by 73.1 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $122,100 and a decrease of 0.7 total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions.

Requested resources will permit an anticipated 475 tolerance petition reviews, 150 temporary tolerance petition reviews, and 60 reviews of inert ingredient requests. Every effort will be made to minimize processing times and backlogs in responding to uncontrollable demand (petitions).

Special emphasis will be placed on policies to ensure that tolerances reflect the most current regulatory status of each active ingredient. Tolerances for cancelled pesticides will be revoked and replaced with appropriate action levels where necessary. The systematic use of the computer-based tolerance assessment system will yield more sophisticated estimates of dietary exposure to pesticide residues. Crop group tolerances will continue to be used where applicable and inert ingredient requests will receive more thorough review. Continued support will be provided to the Codex Alimentarius program and associated activities that set international tolerances. International tolerance levels will be adopted into the U.S. system whenever feasible in order to facilitate international trade, improve international consistency in pesticide regulation, and conserve U.S. resources by using the results of reviews by other countries and international organizations.

1986 Program

In 1986, the Agency is allocating a total of $2,780,100 supported by 73.8 total workyears for this program, all of which is from the Salaries and Expenses appropriation.

The tolerance revocation policy requiring that EPA revoke a tolerance for a cancelled or suspended pesticide is being fully implemented in 1986. EPA expects this activity to increase as a result of voluntary cancellations and suspensions (many in response to Data Call-in), registration standards, and special reviews. In addition, the computer-based Tolerance Assessment System is being refined and selectively used to yield more realistic and sophisticated estimates of dietary exposure to pesticide residues.

Most of the tolerance fees collected in 1986 are under a revised fee structure, effective February, 1986. However, most of the 1986 workload and associated earnings (value of completed petitions) consist of petitions submitted in prior years under the old fee structure.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,131,400 supported by 78.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation.

In 1985, emphasis was placed on improving the processing time for new tolerances, with special attention given to requests for tolerances for first-time uses. The activities and resources associated with temporary tolerance petitions were moved from the Special Registration program to the Tolerance program in order to consolidate all tolerance setting and tolerance fee-related activities.

The developing, computer-based Tolerance Assessment System was used selectively to refine the Office of Pesticides Programs' estimates of dietary exposure to pesticide residues. Revised tolerance fees were proposed and published in the Federal Register.

PESTICIDES

Generic Chemical Review

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Generic Chemical Review								
Salaries & Expenses		$12,390.5	$12,676.8	$13,024.6	-$560.0	$12,464.6	$13,063.7	$599.1
Abatement Control and Compliance		$11,862.1	$9,354.7	$9,354.7	-$402.3	$8,952.4	$9,354.7	$402.3
	TOTAL	$24,252.6	$22,031.5	$22,379.3	-$962.3	$21,417.0	$22,418.4	$1,001.4
TOTAL:								
Salaries & Expenses		$12,390.5	$12,676.8	$13,024.6	-$560.0	$12,464.6	$13,063.7	$599.1
Abatement Control and Compliance		$11,862.1	$9,354.7	$9,354.7	-$402.3	$8,952.4	$9,354.7	$402.3
Generic Chemical Review	TOTAL	$24,252.6	$22,031.5	$22,379.3	-$962.3	$21,417.0	$22,418.4	$1,001.4
PERMANENT WORKYEARS								
Generic Chemical Review		232.8	244.8	257.7		257.7	257.7	
TOTAL PERMANENT WORKYEARS		232.8	244.8	257.7		257.7	257.7	
TOTAL WORKYEARS								
Generic Chemical Review		249.6	260.4	274.3		274.3	274.3	
TOTAL WORKYEARS		249.6	260.4	274.3		274.3	274.3	

PESTICIDES

Generic Chemical Review

Budget Request

The Agency requests a total of $22,418,400 supported by 274.3 total workyears for 1987, an increase of $1,001,400 and no change in total workyears from 1986. Of the request, $13,063,700 will be for the Salaries and Expenses appropriation and $9,354,700 will be for the Abatement, Control and Compliance appropriation, an increase of $599,100 and $402,300, respectively.

Program Description

This subactivity includes:

Generic Chemical Review -- The primary products of the Generic Chemical Review program are 1) Data Call-In - to require registrants to fill gaps in the current registration data base in time for registration standards development and/or to aid in the identification of potentially unreasonable adverse effects; 2) Registration Standards - to enable the Agency to meet efficiently the statutory mandate to update and reexamine information on currently registered pesticides and to reregister them as appropriate; and 3) Special Review - to evaluate rigorously the risks and benefits of pesticides with an identified potential for producing significant adverse health or environmental effects and to take appropriate regulatory action (e.g., suspend, cancel, or return to registration).

GENERIC CHEMICAL REVIEW

1987 Program Request

The Agency requests a total of $22,418,400 supported by 274.3 total workyears for this program, of which $13,063,700 will be for the Salaries and Expenses appropriation and $9,354,700 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $599,100 and $402,300, respectively, and no change in total workyears. The increase in both appropriations reflects increasing support for the registration standards program.

EPA will establish 25 registration standards on existing chemicals in 1987. The Agency will continue to develop registration standards by clusters of similar-use chemicals, giving priority to those having high exposure and potential hazard through their volume of use and/or food use. When all of the data required by the data call-in and registration standards programs are available and reviewed, the registration standard permits comprehensive review and updating to produce a final Regulatory Standard and Tolerance Reassessment (FRSTR). One FRSTR review will be conducted in 1987.

Some pesticide active ingredients are also used as inert ingredients in other formulated products, and many have the potential to cause unreasonable adverse effects. In 1987, the review of inert uses, as well as active uses, of one pesticide will be included in the registration standards program.

The Agency will resume the call-in of missing data for non-food use chemicals based on the 1986 evaluation of the 1985 test program wherein registrants identified data gaps. The Agency will continue its efforts to improve its product chemistry data base. This is necessary to determine inerts, impurities, and contaminants of toxicological concern in pesticide products and the types of studies necessary for a full health and safety assessment.

Review of studies called in during prior years, including studies of groundwater contamination and chronic health effects, will be continued. Priority will be given to those studies containing information regarding unreasonable adverse effects, as identified in accordance with section 6(a)(2) of FIFRA.

Resources requested for 1987 will enable the completion of 13 Special Review decisions. Special Reviews will be initiated according to revised criteria which more realistically reflect actual risk. The number of Special Reviews may vary since the initiation of Special Reviews is responsive to the identification of potential risks during registration standards development and the review of new chemicals, the outcomes of which cannot be predetermined. Administrative hearings will be held as required on regulatory action proposed by the Agency in the Special Review process.

The results of lab audits will be employed in the Special Review and Registration processes in order to assure that health and environmental effects data are used to support pesticide registration actions. The use of Integrated Pest Management (IPM) techniques in urban pest management will be strengthened in cooperation with other agencies. IPM will be considered in special reviews on a case-by-case basis, among the full range of potential risk-reduction measures that the Agency examines.

Monitoring of selected pesticide exposure problems and accidental exposure incidents will be continued in cooperation with various Federal, State and other institutional sources. Furthermore, the Pesticides program will continue to participate in a joint survey with the Office of Drinking Water to establish a reliable estimate of the national pesticide exposure risk through groundwater.

Beginning in 1987, the Agency plans to institute fees for its reregistration activities. The amounts collected would not affect the request for appropriated funds in 1987.

1986 Program

In 1986, the Agency is allocating a total of $21,417,000 supported by 274.3 total workyears for this program, of which $12,464,600 is from the Salaries and Expenses appropriation and $8,952,400 is from the Abatement, Control and Compliance appropriation.

The Agency is continuing to shift emphasis from the registration of new pesticides to the review of existing, currently registered pesticides whose registrations are more likely to be supported by incomplete data or data which are inadequate by today's standards. In 1986, the program emphasized support for registration standards follow-up, Final Regulatory Standards and Tolerance Reassessments (FRSTRs), review of inert uses of active ingredients, lab audits, and special reviews.

Twenty-five registration standards and 13 Special Reviews are projected for 1986. Emphasis is being placed on identifying and evaluating new chemicals which exceed the risk criteria. Also in 1986, previously called-in data is being reviewed, including data on chemicals used as termiticides and on grain fumigant alternatives to EDB.

The Agency is continuing to provide indemnification for losses resulting from the cancellation of ethylene dibromide (EDB) and 2,4,5-T, and to support the disposal of cancelled pesticides as required.

In the registration standards established to date, health and environmental problems have commonly been identified, and corrective actions taken to reduce risk. In every standard, important health and environmental data gaps are identified, and commitments are being received from registrants to generate and submit required data expeditiously. The data needs are determined on a case-by-case basis, considering the use pattern and properties of each chemical. This ensures that the Agency asks only for data essential to its decision process and thereby minimizes costs to registrants and the public.

Exposure data is being called in to facilitate the evaluation of the significance of new and existing health effects data, allowing more timely Agency reactions to potentially serious hazards. This is vital since the Data Call-In program virtually completed in 1985 the call-in of long term chronic data for food use chemicals. In addition, the Data Call-In program is focusing on the call-in of updated confidential statements of formula (CSF) which are essential since most existing data are based on outdated requirements and procedures. Laboratory data audits are continuing to ensure the validity of laboratory studies performed to support registration.

The Agency expects that the number of pesticides determined to contaminate groundwater, and the number of locations involved, is increasing. OPP is participating in a groundwater monitoring and hazard assessment project to characterize this problem and formulate an appropriate regulatory response. In 1986 the principal activity is the initiation of a national groundwater survey conducted jointly with the Drinking Water program.

1985 Accomplishments

In 1985, the Agency obligated a total of $24,252,600 supported by 249.6 total workyears, of which $12,390,500 was from the Salaries and Expenses appropriation and $11,862,100 was from the Abatement, Control and Compliance appropriation.

Special review decisions were reached on 11 chemicals. In addition, new review procedures were introduced, providing for early involvement of all EPA offices in the development of regulatory decisions, including Special Reviews.

In-1985, the Data Call-In program virtually completed call-in of long term chronic data for food use chemicals. A test program was initiated in 1985 to call in data on non-food use chemicals, featuring the identification of data gaps by registrants. The program will be resumed in 1987 following an evaluation in 1986.

Laboratory data audits were conducted by the Agency or cooperatively with other agencies to ensure the development of high-quality test data on the health and environmental effects of pesticides. The Agency began to provide indemnification for losses resulting from the cancellation of ethylene dibromide (EDB) and the disposal of products containing EDB.

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PESTICIDES

Pesticides Enforcement

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Pesticides Enforcement								
Salaries & Expenses		$4,188.8	$4,564.9	$4,509.5	-$194.0	$4,315.5	$4,496.1	$180.6
Abatement Control and Compliance		$88.8	$195.0	$195.0	-$8.4	$186.6	$195.0	$8.4
	TOTAL	$4,277.6	$4,759.9	$4,704.5	-$202.4	$4,502.1	$4,691.1	$189.0
Pesticides Enforcement Grants								
Abatement Control and Compliance		$9,717.0	$9,703.4	$9,703.4	-$417.2	$9,286.2	$8,703.4	-$582.8
	TOTAL	$9,717.0	$9,703.4	$9,703.4	-$417.2	$9,286.2	$8,703.4	-$582.8
Pesticides Certification & Training								
Abatement Control and Compliance		$2,596.3	$2,600.0	$2,600.0	-$111.7	$2,488.3	$2,500.0	$11.7
	TOTAL	$2,596.3	$2,600.0	$2,600.0	-$111.7	$2,488.3	$2,500.0	$11.7
TOTAL:								
Salaries & Expenses		$4,188.8	$4,564.9	$4,509.5	-$194.0	$4,315.5	$4,496.1	$180.6
Abatement Control and Compliance		$12,402.1	$12,498.4	$12,498.4	-$537.3	$11,961.1	$11,398.4	-$562.7
Pesticides Enforcement	TOTAL	$16,590.9	$17,063.3	$17,007.9	-$731.3	$16,276.6	$15,894.5	-$382.1
PERMANENT WORKYEARS								
Pesticides Enforcement		97.0	100.6	100.3		100.3	99.3	-1.0
TOTAL PERMANENT WORKYEARS		97.0	100.6	100.3		100.3	99.3	-1.0

PESTICIDES

Pesticides Enforcement

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Pesticides Enforcement	107.5	110.6	110.6		110.6	109.5	-1.1
TOTAL WORKYEARS	107.5	110.6	110.6		110.6	109.5	-1.1

PESTICIDES

Pesticides Enforcement

Budget Request

The Agency requests a total of $15,894,500 supported by 109.5 total workyears for 1987, a decrease of $382,100 and 1.1 total workyears from 1986. Of the request, $4,496,100 will be for the Salaries and Expenses appropriation and $11,398,400 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $180,600 and a decrease of $562,700, respectively.

Program Description

The purpose of this sub-activity is to assure the compliance by all parts of the pesticide industry, including users, producers, and distributors, with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). This is accomplished primarily through cooperative enforcement agreements between States, Territories, and EPA.

This subactivity encompasses three program areas:

Pesticides Enforcement -- The pesticide enforcement program emphasizes compliance with FIFRA and related rules and regulations. The Regional offices negotiate and monitor grant activities for the Cooperative Enforcement programs and the State Applicator Certification and Training programs, and conduct compliance monitoring, enforcement, and certification and training activities in non-grant States. The Regional pesticides enforcement program also provides compliance and technical assistance to the agricultural chemical industry, commercial and private applicators, user groups, and States. EPA undertakes compliance assistance efforts to assist these groups with product registrations, special local needs registrations, and emergency exemptions, helping them understand and meet their obligations under FIFRA.

The Regional enforcement program provides assistance in enforcement actions initiated by the States. In addition, it prepares and issues notices of violation and administrative orders in instances where a State does not participate in the cooperative enforcement program or where a State refers a case to the Agency for action.

Headquarters provides overall program guidance and sets national program priorities. The major function of Headquarters includes providing support to regulation development, including enforcement response policies and compliance monitoring strategies; providing technical case development and general oversight to cooperative Federal/State enforcement programs and Federal/State applicator certification and training programs; and developing annual cooperative agreement guidance documents.

Pesticides Enforcement Grants -- Pesticides cooperative enforcement agreements account for most of the pesticides compliance monitoring enforcement activities. Under the terms of cooperative agreements with EPA, the States inspect pesticide producer establishments, provide marketplace surveillance, and investigate pesticide use, misuse, and reentry matters. Cooperative agreements also support the States in monitoring pesticide imports, inspecting pesticide dealer records, and reviewing commercial applicator records.

Pesticides Certification and Training -- EPA provides funds, divided between the training program and the certification program, to ensure that only competent, trained applicators handle, apply and store highly toxic, restricted-use pesticides. The Agency transfers funds for training applicators to the U.S. Department of Agriculture for distribution to State Cooperative Extension Services. EPA distributes certification funds via cooperative agreements to designated State agencies. The States use funds for certification activities such as developing and grading examinations, issuing credentials, monitoring training, and keeping records of certified applicators. The Agency also provides funding for Federal certification and training programs in Colorado and Nebraska.

PESTICIDES ENFORCEMENT

1987 Program Request

The Agency requests a total of $4,691,100 supported by 109.5 total workyears for this program, of which $4,496,100 will be for the Salaries and Expenses appropriation and $195,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $180,600 and $8,400, respectively, and a decrease of 1.1 total workyears. The increase reflects increasing support for cooperative agreements and State oversight.

In 1987, the pesticides enforcement program will again concentrate on State participation, under cooperative enforcement agreements, in the nationwide pesticide compliance monitoring program. The Agency will emphasize achieving compliance with rules governing pesticide use, with relatively less emphasis on product surveillance in the marketplace. The States will also be responsible for enforcing notices of intent to suspend product registrations issued under the Data Call-In program. The primary Federal role at the regional level will be oversight and management of State cooperative agreement programs and administration of Federal applicator certification and training programs in Colorado (for private applicators only) and Nebraska, and of a pesticides enforcement program in Nebraska.

In addition to providing overall program guidance and management, Headquarters will assist in the development of new and revised regulations and will develop compliance monitoring strategies and enforcement response policies for all such rules. Headquarters will provide guidance and general oversight to the Federal/State cooperative enforcement programs and applicator certification and training programs, plus technical and analytical support for regional activities. Both Headquarters and the regions are responsible for quality assurance and quality control of all enforcement data collected by EPA.

1986 Program

In 1986, the Agency is allocating $4,502,100 supported by 110.6 total workyears, which includes $4,315,500 from the Salaries and Expenses appropriation and $186,600 from the Abatement, Control and Compliance appropriation.

In 1986, the Agency is emphasizing State participation in pesticide compliance monitoring and enforcement activities through cooperative enforcement agreements. There are 54 States and Territories participating in cooperative enforcement agreements, 51 State certification programs, and 52 training programs. Federal compliance monitoring activities is continuing in States without cooperative agreements. Other Federal responsibilities include the management of the laboratory inspection/data audit program, import and export surveillance, provision of technical and compliance assistance to the States and the regulated community, and the operation of a computer system maintaining pesticide producer establishment and production records and other related enforcement data.

1985 Accomplishments

In 1985, the Agency obligated $4,277,600 supported by 107.5 total workyears, including $4,188,800 from the Salaries and Expenses appropriation and $88,800 from the Abatement, Control and Compliance appropriation.

In 1985, the Federal compliance monitoring program accomplished the following: 224 inspections of pesticide producing establishments, 242 use and reentry inspections, 355 marketplace inspections, 282 import inspections at ports of entry, 215 applicator license and record inspections, 263 dealer record inspections, and 86 laboratory inspections that included 291 test study audits. The Agency issued 1,343 notices of warning for product/producer and use violations and 236 administrative orders.

Headquarters prepared draft or final compliance monitoring strategies for Good Laboratory Practices (GLPs), the lindane cancellation, registration standards, Compound 1080 and daminozide restrictions, a revised strategy for FIFRA Section 3(c)(2)(B) data provision compliance, and preliminary strategies for dicofol and captan use restrictions. Headquarters also prepared a revised enforcement response policy for FIFRA Section 7 establishment reporting requirements.

A total of 54 cooperative enforcement agreements, 51 State certification programs, and 52 training programs were in place in 1985. As part of the cooperative agreement program, the Agency provided training for State inspectors, chemists and case development staff.

PESTICIDES ENFORCEMENT GRANTS

1987 Program Request

The Agency requests a total of $8,703,400 for cooperative enforcement agreements, all for the Abatement, Control and Compliance appropriation. This represents a decrease of $582,800, reflecting a reduction in State inspections under the cooperative enforcement agreement program. This grant will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs.

The Agency will continue cooperative enforcement agreements with 54 participating States and Territories. The cooperative enforcement agreement program is designed to permit participating States and Territories to determine their program priorities and utilize the resources provided to act upon these priorities. State activities will include use and reentry investigations, pesticide producer establishment and marketplace inspections, applicator license and record inspections, and dealer record inspections. As compared with past years, resources will be shifted from marketplace sampling to provide greater emphasis upon use compliance.

1986 Program

In 1986, the Agency is allocating a total of $9,286,200 for cooperative agreements from the Abatement, Control and Compliance appropriation. These agreements emphasize user compliance with label directions for proper use and application, as well as manufacturer adherence to product formulation requirements under FIFRA.

1985 Accomplishments

In 1985, the Agency obligated $9,717,000 for cooperative agreements from the Abatement, Control and Compliance appropriation. Fifty-four participating States and Territories conducted approximately 1,916 inspections of establishments, 14,778 use, reentry, and experimental use inspections, 10,728 marketplace inspections, 323 import inspections, 12,545 applicator license and record inspections, and 9,263 dealer record inspections. The Agency issued 4,223 notices of violation and 335 administrative orders, and engaged in 186 criminal litigations.

PESTICIDES CERTIFICATION AND TRAINING

1987 Program Request

The Agency requests a total of $2,500,000 for the applicator certification and training program, all for the Abatement, Control and Compliance appropriation. This represents an increase of $11,700, reflecting adjustments to the 1986 base as part of goverment-wide deficit reductions. This grant will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs.

This program will support 51 applicator certification programs and 52 applicator training programs in participating States and Territories, as well as Federal certification programs in Colorado (for private applicators only) and Nebraska. These resources will continue to support the certification and training of applicators using highly toxic, restricted-use pesticides.

1986 Program

In 1986, the Agency is allocating a total of $2,488,300 for cooperative agreements from the Abatement, Control and Compliance appropriation. This funding supports 51 applicator certification programs and 52 training programs with States and Territories, as well as Federal programs in Colorado (for private applicators only) and Nebraska. EPA is also developing an action plan to implement the recommendations of the task force that completed its review of the Pesticides Certification and Training program in 1985.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,596,300 for cooperative agreements from the Abatement, Control and Compliance appropriation in support of 51 certification programs and 52 training programs with States and Territories. In addition, these funds supported Federal programs in Colorado and Nebraska.

Also in 1985, a task force reviewed the Pesticides Certification and Training program to determine what actions, if any, should be taken to improve it. The task force was composed of representatives of EPA, USDA, State Cooperative Extension Services and State Lead Agencies.

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RADIATION

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$8,567.8	$7,621.1	$8,041.0	-$345.6	$7,695.4	$8,161.4	$466.0
Abatement Control and Compliance	$2,939.8	$2,144.6	$2,144.6	-$92.3	$2,052.3	$3,810.6	$1,758.3
Research & Development	$846.9	$16.7	$16.5	-$.7	$15.8		-$15.8
TOTAL, Radiation	$12,354.5	$9,782.4	$10,202.1	-$438.6	$9,763.5	$11,972.0	$2,208.5
PERMANENT WORKYEARS	149.1	141.3	155.3		155.3	152.0	-3.3
TOTAL WORKYEARS	161.4	147.3	160.0		160.0	157.0	-3.0
OUTLAYS	$16,068.9	$9,758.4	$12,723.5	-$325.6	$12,397.9	$12,136.4	-$261.5
AUTHORIZATION LEVELS	All except Research and Development is by virtue of the Appropriation Act. The Research and Development Act expired September 30, 1981, and reauthorization is pending.						

RADIATION

OVERVIEW AND STRATEGY

EPA's mandate to protect the public health and environment from adverse effects of radiation exposure is derived from several statutes: the Atomic Energy Act, which provides authority for Federal guidance and general environmental standards (transferred to EPA by Reorganization Plan #3 of 1970); the Clean Air Act Amendments of 1977, which provide authority to regulate radioactive air pollutants; the Resource Conservation and Recovery Act and the Uranium Mill Tailings Radiation Control Act, which charge EPA with providing standards for protection from waste materials with radioactive content; the Nuclear Waste Policy Act; and other authorities contained in the Federal Water Pollution Control Act; the Marine Protection, Research, and Sanctuaries Act; the Safe Drinking Water Act; the Public Health Service Act; and the National Environmental Policy Act.

These statutes generally prescribe environmental assessment, technology assessment, standard-setting, and research roles for EPA. The disposal of radioactive wastes in an environmentally sound manner is a complex task that involves the collective efforts of EPA, the Nuclear Regulatory Commission (NRC), the Department of Energy (DOE), States, and private industry. In some cases, enforcement responsibilities are vested in other agencies, notably the NRC. In these instances, EPA performs some oversight functions to ensure that established standards and guidance are followed.

The basic program strategy for EPA's Radiation Program focuses on three major objectives: (1) reduce health effects and environmental impacts; (2) assess emerging radiation problems; and (3) maintain a capability to respond to emergencies.

Reduce adverse health effects and environmental impacts from radiation exposure through a program of standards and guides. Source categories which emit airborne radionuclides are assessed and regulated, where required, by the promulgation and implementation of National Emission Standards for Hazardous Air Pollutants, under section 112 of the Clean Air Act. The various classes of radioactive wastes and their disposal options are evaluated and regulated in a program designed to ensure that disposal takes place in an environmentally sound manner which limits exposures. Principal tasks remaining include promulgation of standards for land and ocean disposal of low-level radioactive wastes, including natural and accelerator-produced materials, and regulation of permissible residual radioactivity levels at decommissioned nuclear facilities. Federal guidance is under development to limit occupational exposures to ionizing radiation, and for general exposure to radiofrequency radiation. In addition to these activities, ancillary efforts include development of permit criteria for the ocean disposal of radioactive wastes, and the examination of special problems associated with high-level wastes stored at the Department of Energy site at Hanford, Washington.

Assess and quantify existing and emerging radiation problems and their potential impact. Respond to issues of serious public concern. Knowledge of radiation exposure from some sources has become more widespread, and the potential for radiation contamination of environmental pathways is growing as greater uses are made of radioactive materials. Requests for assistance in site assessments and radiochemical analyses of environmental samples have increased substantially, particularly from the Federal sector. Measurements of radon levels from naturally occurring radium in soil and rocks in the Reading Prong areas of Pennsylvania, New Jersey, and New York, and the probability of similar exposure levels in other parts of the country, demonstrate the need to address this environmental problem. Therefore, the Agency is emphasizing the radon issue in 1986 and will continue to do so in 1987. EPA is coordinating its activities with DOE, which has a long-standing program in radon and related issues. EPA's short-term efforts to address radon exposure are: identifying the potential for high-risk areas; developing measurement capabilities in States; and encouraging private sector development of mitigation methods. Longer-term objectives include: providing criteria for determining high risk lands; demonstrating low cost mitigation methods; expanding measurement capabilities of States; defining the distribution of risks in the United States; and informing the public and industry about measurement techniques, mitigation methods, and preventive techniques.

Maintain a capability to respond to emergencies and to aid development and testing of State, local, and Federal plans for emergency response. To provide continuous information on radiation levels in environmental pathways, the Agency maintains fully equipped emergency response teams which can be flown to sites where significant radiation releases have occurred or appear imminent. Protective Action Guides being developed will provide consistent guidance to responsible officials for preventive or remedial actions which should be taken to limit population exposure from unplanned releases of radiation. The Environmental Radiation Ambient Monitoring System provides a mechanism for tracking and measuring large atmospheric releases of radioactive materials across the country.

In 1987, the Agency will continue the off-site monitoring program. This effort supports the Department of Energy's operation of nuclear test sites. In addition, the quality assurance program for radiochemical analyses will be maintained. The Agency will also continue research on mitigating indoor radon levels. This effort is described in the air section of the budget request.

RADIATION

PROGRAM ACTIVITIES	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs 1986
Cumulative Outputs					
Regulations:					
Proposals	9	12	11	11	-
Promulgations	9	9	10	11	+1
Guides:					
Proposals	3	4	4	4	-
Promulgations	1	4	3	4	+1

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RADIATION

Radiation Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
PROGRAM							
Monitoring Systems & Quality Assurance - Radiation							
Salaries & Expenses	$201.2	$196.3	$196.3	-$8.4	$187.9	$196.3	$8.4
Research & Development	$16.7	$16.7	$16.5	-$.7	$15.8		-$15.8
TOTAL	$217.9	$213.0	$212.8	-$9.1	$203.7	$196.3	-$7.4
Health Effects - Radiation							
Salaries & Expenses	$811.5						
Research & Development	$830.2						
TOTAL	$1,641.7						
TOTAL:							
Salaries & Expenses	$1,012.7	$196.3	$196.3	-$8.4	$187.9	$196.3	$8.4
Research & Development	$846.9	$16.7	$16.5	-$.7	$15.8		-$15.8
Radiation Research TOTAL	$1,859.6	$213.0	$212.8	-$9.1	$203.7	$196.3	-$7.4
PERMANENT WORKYEARS							
Monitoring Systems & Quality Assurance - Radiation	3.8	5.0	5.0		5.0	5.0	
Health Effects - Radiation	15.2						
TOTAL PERMANENT WORKYEARS	19.0	5.0	5.0		5.0	5.0	

RADIATION

Radiation Research

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Monitoring Systems & Quality Assurance - Radiation	4.7	5.0	5.0		5.0	5.0	
Health Effects - Radiation	15.8						
TOTAL WORKYEARS	20.5	5.0	5.0		5.0	5.0	

RADIATION

Radiation Research

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Conduct an Off-Site Radiological Monitoring Program

- Annual report of off-site surveillance around the Nevada Test Site (NTS) -- Calendar Year 1986 (Monitoring)

Objective 2: Conduct an Analytical Radiochemical Quality Assurance Program

- Annual report on laboratory radionuclide intercomparison studies (Monitoring)

1986 PLANNED OUTPUTS

Objective 1: Conduct an Off-Site Radiological Monitoring Program

- Annual report of off-site surveillance around the Nevada Test Site -- Calendar Year 1985 (Monitoring)

Objective 2: Conduct an Analytical Radiochemical Quality Assurance Program

- Annual report on laboratory radionuclide intercomparison studies (Monitoring)

1985 ACTUAL OUTPUTS

Objective 1: Conduct an Off-Site Radiological Monitoring Program

- Annual report of off-site surveillance around the Nevada Test Site -- Calendar Year 1984 (Monitoring)

Objective 2: Conduct an Analytical Radiochemical Quality Assurance Program

- Annual report on laboratory radionuclide intercomparison studies (Monitoring)

RADIATION

Radiation Research

Budget Request

The Agency requests a total of $196,300 supported by 5.0 total workyears for 1987, a decrease of $7,400 and no change in total workyears from 1986. The entire request will be for the Salaries and Expenses appropriation. This represents an increase of $8,400 in the Salaries and Expenses appropriation and a decrease of $15,800 in the Research and Development appropriation.

Program Description

The goal of the radiation research program is to provide the Office of Radiation Programs (ORP), and other EPA, federal, regional, state and local officials with scientifically credible data, methodologies, and assessments required to determine public exposure to radioactive materials in the environment and to control such exposure. The following objectives support this goal:

Objective 1. Conduct an Off-Site Radiological Monitoring Program. The program under this objective provides comprehensive radiological monitoring and surveillance services to meet specific Department of Energy (DOE) requirements for its nuclear testing programs, especially at the Nevada Test Site (NTS). This work is conducted under a reimbursable arrangement with DOE.

Objective 2. Conduct an Analytical Radiochemical Quality Assurance Program. EPA conducts a radiochemical analytical quality assurance program which supports federal, regional, state, and local laboratories making radioactivity measurements to assess the impact of local nuclear facilities. It also supports the Office of Radiation Programs by serving as a source of radionuclide and instrument standards and radiochemical methods for analysis of environmental samples.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Program Request

The Agency requests a total of $196,300 supported by 5.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $8,400 in the Salaries and Expenses appropriation and a decrease of $15,800 in the Research and Development appropriation, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects the Agency's ability to carry out its responsibilities in this program without an extramural component.

Conduct an Off-Site Radiological Monitoring Program. Monitoring support to DOE's Nevada Test Site and other test locations will continue. This support consists of safety programs for nuclear testing and monitoring at the NTS as well as at sites in Mississippi, Colorado, and New Mexico.

Conduct an Analytical Radiochemical Quality Assurance Program. Technical expertise and guidance to regional, state, and contractor laboratories for radiochemical analyses of environmental samples will continue. Inter-laboratory comparison studies will be initiated to provide data on the precision and accuracy of radioactivity measurements in milk, simulated diet, drinking water, and air.

1986 Program

In 1986, the Agency is allocating a total of $203,700 supported by 5.0 total workyears for this program, of which $187,900 is from the Salaries and Expenses appropriation and $15,800 is from the Research and Development appropriation.

In 1986, annual reports are being developed on off-site surveillance around the Nevada Test Site and on laboratory radionuclide comparison studies.

1985 Accomplishments

In 1985, the Agency obligated a total of $217,900 supported by 4.7 total workyears for this program, of which $201,200 was from the Salaries and Expenses appropriation and $16,700 was from the Research and Development appropriation.

In 1985, the major accomplishments were the publication of the annual report on the Laboratory Radionuclide Intercomparison Studies and the annual report of off-site surveillance around the Nevada Test Site. Quality assurance support was also provided.

HEALTH EFFECTS

1987 Program Request

The Agency requests no resources for this activity in 1987.

1986 Program

The Agency is allocating no resources for this program in 1986, reflecting the completion of health effects research needed to support the development of Federal Radiation Protection Guidance. A core staff is being maintained to ensure the orderly phase-out of the program.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,641,700 supported by 15.8 total workyears for this program, of which $811,500 was from the Salaries and Expenses appropriation and $830,200 was from the Research and Development appropriation.

Health effects research on non-ionizing radiation focused primarily on questions remaining since completion of a 1984 report on the biological effects of radiofrequency radiation.

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RADIATION

Radiation Criteria, Standards & Guidelines

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Radiation Criteria, Standards & Guidelines							
Salaries & Expenses	$3,840.7	$3,756.2	$3,691.1	-$158.6	$3,532.5	$3,499.0	-$33.5
Abatement Control and Compliance	$2,035.9	$1,544.6	$1,544.6	-$66.4	$1,478.2	$1,060.6	-$417.6
TOTAL	$5,876.6	$5,300.8	$5,235.7	-$225.0	$5,010.7	$4,559.6	-$451.1
TOTAL:							
Salaries & Expenses	$3,840.7	$3,756.2	$3,691.1	-$158.6	$3,532.5	$3,499.0	-$33.5
Abatement Control and Compliance	$2,035.9	$1,544.6	$1,544.6	-$66.4	$1,478.2	$1,060.6	-$417.6
Radiation Criteria, Standards & Guidelines TOTAL	$5,876.6	$5,300.8	$5,235.7	-$225.0	$5,010.7	$4,559.6	-$451.1
PERMANENT WORKYEARS							
Radiation Criteria, Standards & Guidelines	69.7	72.3	72.3		72.3	67.0	-5.3
TOTAL PERMANENT WORKYEARS	69.7	72.3	72.3		72.3	67.0	-5.3
TOTAL WORKYEARS							
Radiation Criteria, Standards & Guidelines	71.8	74.0	74.0		74.0	69.0	-5.0
TOTAL WORKYEARS	71.8	74.0	74.0		74.0	69.0	-5.0

RADIATION

Radiation Criteria, Standards, and Guidelines

Budget Request

The Agency requests a total of $4,559,600 supported by 69.0 total workyears for 1987, a decrease of $451,100 and 5.0 total workyears from 1986. Of the request, $3,499,000 will be for the Salaries and Expenses appropriation and $1,060,600 will be for the Abatement, Control and Compliance appropriation, decreases of $33,500 and $417,600 respectively.

Program Description

EPA develops and promulgates radiation environmental standards and guidelines under this subactivity. These standards and guidelines protect the public health and the environment by minimizing risk of radiation exposures from nuclear energy applications, naturally occurring radioactive materials, medical and occupational radiation uses, and nonionizing radiation.

RADIATION CRITERIA, STANDARDS, AND GUIDELINES

1987 Program Request

The Agency requests a total of $4,559,600 supported by 69.0 total workyears for this program, of which $3,499,000 will be for the Salaries and Expenses appropriation and $1,060,600 will be for the Abatement, Control and Compliance appropriation. This represents a decrease of $33,500 and $417,600, respectively, and a decrease of 5.0 total workyears. The decreases reflect streamlining support for regulation and guidance development.

In 1987, EPA will concentrate on three major areas: addressing airborne radionuclides, establishing standards for radioactive waste management, and developing Federal Guidance. The airborne radionuclides work will focus on the completion of a review of phosphogypsum piles for the potential development of National Emission Standards for Hazardous Air Pollutants (NESHAPs) under section 112 of the Clean Air Act, as well as following up on the existing standards as necessary.

As part of programs addressing the problem of radioactive waste disposal, EPA will examine extending the coverage of the high-level waste standards to address special defense related wastes which are presently stored in various locations. Much of this effort will focus on Hanford, Washington. EPA will also promulgate the low-level radioactive waste standard, which has been expanded to cover concentrated natural and accelerator produced radioactive materials. In addition, EPA will continue technical work on the development of environmental standards or Federal Guidance for residual radioactivity limits at decommissioned nuclear facilities.

In 1987, EPA will complete the development of technical criteria for ocean dumping of radioactive wastes. The Agency will prepare to review and decide on permit applications which may be received for ocean dumping. The Agency will also participate in deliberations of the London Dumping Convention and other international bodies which are concerned with ocean disposal.

In 1987, EPA will take appropriate action to complete Protective Action Guides (PAGs) for airborne plume and ingestion pathways, which will be added to the Manual of Protective Actions. This manual is used in Federal, State, and local emergency preparedness plans in the event of a radiation incident. A draft of the relocation and recovery PAGs will be completed in 1987. In addition, EPA will publish the final radiofrequency radiation guidance. Support to other Federal agencies will be given in the implementation of existing Federal Guidance covering nonionizing radiation, diagnostic uses of medical x-rays, and occupational exposure of workers.

1986 Program

In 1986, the Agency is allocating a total of $5,010,700 supported by 74.0 total workyears for this program, of which $3,532,500 is from the Salaries and Expenses appropriation and $1,478,200 is from the Abatement, Control and Compliance appropriation.

During 1986, regulatory projects have three focal points: (1) regulation of airborne radionuclides under section 112 of the Clean Air Act, (2) management of radioactive wastes under the authorities of the Atomic Energy Act; the Nuclear Waste Policy Act; the Uranium Mill Tailings Radiation Control Act; and the Marine Protection, Research, and Sanctuaries Act, and (3) development of Federal Guidance under the provisions of the Atomic Energy Act.

A final NESHAPs for licensed uranium mills is expected to be promulgated in 1986. Work will continue on the risk assessment of phosphogypsum piles prior to making the determination of whether regulatory action is needed. Agreements are being negotiated with Department of Energy (DOE) and the Nuclear Regulatory Commission (NRC) on how NESHAPs will be implemented at facilities under their cognizance. The Agency's continuing effort in the high-level waste area includes taking actions necessary to interpret the high-level waste standards relative to their implementation. The standard to be proposed in 1986 for land disposal of low-level radioactive wastes has been extended to cover discrete sources of natural and acceleratorproduced radioactive materials. Analytical work necessary to develop environmental standards for residual radioactivity at decommissioned nuclear facilities also continues, with the issuance of an advance notice of proposed rulemaking. Analytical work continues to support the Agency's capability to review permit applications for the ocean disposal of radioactive wastes. A biological monitoring criteria report and a draft site selection criteria report on ocean disposal is being completed. Participation in international deliberations continues. Guidance for radiofrequency radiation is a candidate for proposal and working arrangements may be established with affected agencies for subsequent implementation of the guidance. The final general occupational exposure guidance will be published in 1986. Drafts of PAGs for airborne plume and ingestion pathways will be completed, while development of the relocation and recovery PAGs continues. EPA and other Federal agencies are working together to assure adequate implementation of existing regulations.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,876,600, supported by 71.8 total workyears for this program, of which $3,840,700 was from the Salaries and Expenses appropriation and $2,035,900 was from the Abatement, Control and Compliance appropriation.

Contract funds and workyears supported the gathering of data and analyses for standards setting, particularly in the areas of airborne radionuclides and radioactive waste disposal. This led to the completion of NESHAPs for four source categories: NRC and DOE facilities, non-DOE facilities, elemental phosphorus plants and underground uranium mines, and to the issuance of the high-level radioactive waste disposal standards. Progress continued on standards for low-level waste disposal, guidance for general occupational radiation exposure, and guidance to limit exposure to radiofrequency radiation. Work was instituted on the development of several PAGs for use in the event of a nuclear incident. In addition, the Agency moved forward with its program to establish standards or guidance for residual radioactivity at decommissioned nuclear facilities.

RADIATION

Radiation Program Implementation

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)								
PROGRAM								
Radiation Program Implementation Salaries & Expenses		$628.7	$655.1	$601.7	-$25.9	$575.8	$616.7	$40.9
	TOTAL	$628.7	$655.1	$601.7	-$25.9	$575.8	$616.7	$40.9
TOTAL: Salaries & Expenses		$628.7	$655.1	$601.7	-$25.9	$575.8	$616.7	$40.9
Radiation Program Implementation	TOTAL	$628.7	$655.1	$601.7	-$25.9	$575.8	$616.7	$40.9
PERMANENT WORKYEARS								
Radiation Program Implementation		10.1	10.0	10.0		10.0	10.0	
TOTAL PERMANENT WORKYEARS		10.1	10.0	10.0		10.0	10.0	
TOTAL WORKYEARS								
Radiation Program Implementation		12.6	12.3	11.0		11.0	11.0	
TOTAL WORKYEARS		12.6	12.3	11.0		11.0	11.0	

RADIATION

Radiation Program Implementation

Budget Request

The Agency requests a total of $616,700 supported by 11.0 total workyears for 1987, an increase of $40,900 and no change in total workyears from 1986. All of the request will be for the Salaries and Expenses appropriation.

Program Description

This program supports activities of EPA's Regional offices and includes: implementing the Radon Action Program, participating in the review and testing of State radiological emergency response plans, reviewing environmental impact statements, providing the public with technical information, providing direct assistance to State and local governments with special radiation problems of a short-term nature, and providing the radiological expertise needed by the Regions to manage radiological problems associated with the drinking water and hazardous waste programs.

RADIATION PROGRAM IMPLEMENTATION

1987 Program Request

The Agency requests a total of $616,700 supported by 11.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $40,900 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

In 1987, selected Regional Offices will help implement the Radon Action Program, which addresses radon exposures from naturally occurring sources, by providing information on the assessment and mitigation of radon in structures. EPA will also continue to emphasize technical assistance to States for emergency response planning. EPA assists States in the development of radiological emergency response plans and formally reviews these plans along with other Federal agencies under the coordination of the Federal Emergency Management Agency. Regional Offices will continue to be involved in the characterization and identification of hazardous waste sites contaminated by radioactivity. This effort supports both the EPA Headquarters hazardous waste programs and the requests from the States. The Regions will continue to be the primary reviewers of environmental impact statements for radiation facilities, such as commercial nuclear power plants, uranium mines and mills, and radioactive waste disposal facilities. The Regions will assist in the implementation of promulgated standards and guidelines. They will be involved with State agencies and the public to present and explain Agency radiation regulations, particularly those for low-level waste disposal and radiofrequency radiation. They will provide continued support to the States for the management of radioactive wastes.

1986 Program

In 1986, the Agency is allocating a total of $575,800 supported by 11.0 total workyears for this program, all of which is from the Salaries and Expenses appropriation.

In 1986, selected Regional Offices are providing support in the development of data and information in the improvement of State capabilities for the implementation of EPA's Radon Action Program. Emergency preparedness and technical assistance to the States on radioactive waste problems also remains a central focus of the EPA Regional radiation program. Regional programs continue to be involved in the characterization of hazardous waste sites subject to possible remedial action. The Regions are also continuing as the primary reviewer of environmental impact statements for radiation facilities such as uranium mines and mills, and radioactive waste disposal facilities. Support to the national program is in the form of participation in the Environmental Radiation Ambient Monitoring System and regulatory work groups and task forces. Cooperation with EPA's Superfund Program will continue and be enhanced to identify and survey potential dump sites for radiation contamination and removal.

1985 Accomplishments

In 1985, the Agency obligated a total of $628,700 supported by 12.6 total workyears for this program, all of which was from the Salaries and Expenses appropriation.

Emergency preparedness and technical assistance to the States and other EPA Regional programs remained the central focus of the EPA Regional radiation program. Regions continued to review environmental impact statements for radiation facilities, such as uranium mills and mines, and radioactive waste disposal sites. They continued to be involved with the characterization of hazardous waste sites subject to possible remedial action under EPA's Superfund Program.

RADIATION

Radiation Environmental Impact Assessment

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
PROGRAM							
Radiation Environmental Impact Assessment							
Salaries & Expenses	$3,085.7	$3,013.5	$3,551.9	-$152.7	$3,399.2	$3,849.4	$450.2
Abatement Control and Compliance	$903.9	$600.0	$600.0	-$25.9	$574.1	$2,750.0	$2,175.9
TOTAL	$3,989.6	$3,613.5	$4,151.9	-$178.6	$3,973.3	$6,599.4	$2,626.1
TOTAL:							
Salaries & Expenses	$3,085.7	$3,013.5	$3,551.9	-$152.7	$3,399.2	$3,849.4	$450.2
Abatement Control and Compliance	$903.9	$600.0	$600.0	-$25.9	$574.1	$2,750.0	$2,175.9
Radiation Environmental Impact Assessment TOTAL	$3,989.6	$3,613.5	$4,151.9	-$178.6	$3,973.3	$6,599.4	$2,626.1
PERMANENT WORKYEARS							
Radiation Environmental Impact Assessment	50.3	54.0	68.0		68.0	70.0	2.0
TOTAL PERMANENT WORKYEARS	50.3	54.0	68.0		68.0	70.0	2.0
TOTAL WORKYEARS							
Radiation Environmental Impact Assessment	56.5	56.0	70.0		70.0	72.0	2.0
TOTAL WORKYEARS	56.5	56.0	70.0		70.0	72.0	2.0

RADIATION

Radiation Environmental Impact Assessment

Budget Request

The Agency requests a total of $6,599,400 supported by 72.0 total workyears for 1987, an increase of $2,626,100 and 2.0 in total workyears from 1986. Of the request, $3,849,400 will be for the Salaries and Expenses appropriation and $2,750,000 will be for the Abatement, Control and Compliance appropriation, an increase of $450,200 and $2,175,900, respectively.

Program Description

Activities in this program provide the information necessary to identify and analyze radiological problems having potential public health impacts and to support the development of standards and guidelines. Also included under this subactivity is the monitoring of environmental radiation, as well as laboratory analysis, technology assessments, emergency preparedness, and emergency response.

RADIATION ENVIRONMENTAL IMPACT ASSESSMENT

1987 Program Request

The Agency requests a total of $6,599,400 supported by 72.0 total workyears for this program, of which $3,849,400 will be for the Salaries and Expenses appropriation and $2,750,000 will be for the Abatement, Control and Compliance appropriation. This represents increases of $450,200 and $2,175,900, respectively, and an increase of 2.0 total workyears. The increases will be used to support the Radon Action Program.

In 1987, EPA will continue to implement a comprehensive Radon Action Program that assists the Department of Energy (DOE) in addressing health impacts of radon exposure. This program includes a national assessment of the health problem, development of preventive practices, assistance in low-cost remedial techniques, field measurements, and development of State and local capabilities. EPA will also continue to support development of standards under the Clean Air Act, the Atomic Energy Act, and other legislative authorities. Field studies used to form the basis of risk assessments and associated risk management decisions will be continued. The residual radioactivity regulatory initiative will require continued field support to evaluate and confirm assumptions built into the development process, including field measurement and analyses. EPA will maintain fully-equipped emergency response capabilities at two field locations. The Environmental Radiation Ambient Monitoring System (ERAMS) will collect and analyze samples of air, precipitation, and milk in its national network to determine ambient radiation levels and will maintain its preparedness to monitor the environment in the event of a large-scale release of radioactive effluents, such as that which will result from atmospheric testing of nuclear devices. The quality assurance program will be operated to ensure accuracy of all laboratory measurements and data analyses conducted either inhouse or through program contracts. In addition, support to States, other Federal agencies, and other parts of EPA will continue in the form of radiochemical analyses, technical assistance, and EPA participation in the Conference of Radiation Control Program Directors. Monitoring of radiation levels in the Three Mile Island area will continue while the reactor core is being removed.

1986 Program

In 1986, the Agency is allocating a total of $3,973,300 supported by 70.0 total workyears for this program, of which $3,[illegible]99,200 is from the Salaries and Expenses appropriation and $574,100 is from the Abatement, Control and Compliance appropriation.

In 1986, EPA will begin a Radon Action Program, a comprehensive radon assessment and mitigation effort to identify the extent of the health hazard associated with elevated radon levels in structures. EPA's program will be designed and coordinated with DOE's long-standing program. A national assessment methodology will be developed, and standardized measurement techniques and protocols will be established. Information about existing measurement methods, remediation and preventive practices, and health risks will be developed. Field validation and preliminary identification of high risk areas will be started. Particular emphasis will be placed on the Reading Prong areas of Pennsylvania, New Jersey, and New York.

In addition to the Radon Action Program, other activities include: continued laboratory and technical support to regulatory and guidance activities, maintenance of an emergency response capability, coordination of EPA Regional Office review and testing of State emergency response plans, assistance to other EPA offices and to State radiological programs, and support for ERAMS. The 1986 program reflects continuing emphasis on standard-setting activities, including resources for Clean Air Act field and laboratory measurements for a uranium mills NESHAPs necessary to meet the regulatory schedule, and further development of the standards information for low-level waste disposal and residual radioactivity at decommissioned nuclear facilities. The Agency will continue its replacement of radiation air monitoring sampling equipment and will continue to monitor and sample air, precipitation, surface water, and milk. Ocean disposal monitoring activities will continue with monitoring and analysis of water, biota, and sediment core samples at numerous ocean sites and development of ocean disposal technical radiation criteria. The monitoring of off-site releases from clean-up operations at Three Mile Island will also continue. Operation of a quality assurance plan for all program activities will continue. In addition, a comprehensive environmental assessment in the Pocatello and Soda Springs areas of Idaho will be initiated.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,989,600 and 56.5 total workyears for this program, of which $3,085,700 was from the Salaries and Expenses appropriation and $903,900 was from the Abatement, Control and Compliance appropriation.

Activities in 1985 included: development of a plan for a Radon Action Program; continued laboratory and technical support to standards-setting, particularly under the Clean Air Act for the development of four NESHAPs; maintenance of an emergency response capability; coordination of EPA Regional Office reviews and testing of State emergency response plans; and assistance to other EPA offices and to State radiological programs. ERAMS was maintained. Ocean disposal monitoring activities included the development of survey and sampling information, analysis of core samples, and development of criteria information in support of a low-level waste ocean disposal regulation. Extramural funds provided partial support to monitoring activities at Three Mile Island, support to the Conference of Radiation Control Program Directors, and studies necessary to develop scientific information for the EPA ocean disposal program.

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INTERDISCIPLINARY

(DOLLARS IN THOUSANDS)

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
APPROPRIATION							
Salaries & Expenses	$25,506.0	$25,107.0	$26,770.7	-$1,150.7	$25,620.0	$27,225.2	$1,605.2
Abatement Control and Compliance	$7,808.2	$7,159.3	$7,759.3	-$333.9	$7,425.4	$5,133.7	-$2,291.7
Research & Development	$22,175.7	$14,900.0	$21,742.8	-$935.0	$20,807.8	$15,516.0	-$5,291.8
TOTAL, Interdisciplinary	$55,489.9	$47,166.3	$56,272.8	-$2.419.6	$53,853.2	$47,874.9	-$5,978.3
PERMANENT WORKYEARS	482.5	491.0	537.7		537.7	544.3	6.6
TOTAL WORKYEARS	533.0	521.5	568.2		568.2	570.0	1.8
OUTLAYS	$54,857.8	$48,252.6	$60,916.3	-$1 343.6	$59,466.7	$52.572.7	-$7,106.0
AUTHORIZATION LEVELS	All except Research and Development is by virtue of the Appropriation Act. The Research and Development Act expired September 30, 1981. and reauthorization is pending.						

INTERDISCIPLINARY

OVERVIEW AND STRATEGY

The Environmental Protection Agency's (EPA) Interdisciplinary Program is composed of several activities that cut across programmatic lines and are not readily assignable to a specific media. These programs address environmental concerns that affect several media and require an interdisciplinary approach. The Interdisciplinary Program includes the Intermedia Research Program within the Research and Development function, the Federal Agencies Compliance Program and the National Environmental Policy Act (NEPA) Compliance Program within the Abatement and Control function, and the legal aspects of the Agency's enforcement efforts.

The Intermedia Research Program encompasses four major activities: scientific assessments, technical information and liaison, exploratory research, and quality assurance management. The Scientific Assessment Program has responsibility for developing uniform risk assessment guidelines for Agencywide application, assuring consistency of approach to guidelines, and coordinating with other agencies through the Risk Assessment Forum. The Technical Information and Liaison Program distributes technical and scientific information from the Office of Research and Development with an emphasis on communicating cost-effective methods for complying with EPA's regulations. The Exploratory Research Program provides long-range exploratory research, conducted primarily through grants and academic research centers. It includes the Distinguished Visiting Scientist Program and the Environmental Trends Program. The Quality Assurance Program provides centralized guidance and management for Agencywide Quality Assurance activities, and performs audits to assess the effectiveness of the Agency Quality Assurance efforts.

The Environmental Review and Coordination Program accomplishes statutory objectives under the authority of NEPA; Section 309 of the Clean Air Act; and Executive Order 12088 - Federal Compliance with Pollution Control Standards, and includes four program activities. The NEPA Compliance program includes the preparation of the Environmental Impact Statements or Findings of No Significant Impact for those agency programs specifically covered by NEPA as well as reviews that are the functional equivalent for those agency programs that are not specifically covered by NEPA. The Federal Facilities program oversees Federal compliance with all Federal statutory environmental requirements, and specifically with Executive Order 12088. The Environmental Review program ensures that Federal agencies carry out their activities in an environmentally sound manner pursuant to NEPA and Section 309 of the Clean Air Act. The Indians program develops and implements policies for dealing with environmental problems on Indian reservations.

Enforcement Policy and Operations provides consistent direction to EPA enforcement for all non-Superfund media to assure the most effective possible stewardship of EPA's enforcement responsibilities as they contribute to the protection of environmental quality. To accomplish this goal, it establishes compliance monitoring and enforcement priorities, policies, and procedural guidelines so that enforcement actions are properly selected and prepared; establishes measures for and monitors performance in achievement of enforcement outcomes; and assures that policies and procedures are correctly implemented by the media enforcement programs and Regional offices. It conducts all legal case development, litigation, and adjudicatory hearing activities for media enforcement programs, including oversight of evidence gathering, preparation and management of cases, and referral of cases to the Department of Justice for litigation.

In addition, this program contains the Agency's criminal investigations effort which entails investigation, preparation, and referral of cases involving criminal violations of environmental statutes. Investigators and attorneys provide support to the Department of Justice during subsequent investigation and litigation of these cases. The National Enforcement Investigations Center (NEIC) provides specialized technical expertise in support of EPA enforcement case preparation activities. NEIC serves as a point of coordination and support for complex investigations, which have a national impact on environmental enforcement. In 1987, this interdisciplinary program will emphasize the support and resolution of ongoing cases in order to maximize environmental benefits by improving compliance with environmental statutes. This program will be increasing its support of the Hazardous Waste Program.

INTERDISCIPLINARY

PROGRAM ACTIVITIES	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs. 1986
Enforcement Actions					
Inspections*	-	-	-	-	-
Notices of Violations*	-	-	-	-	-
Administrative Orders	2623	**	2452	2580	+ 128
Civil Cases					
Ongoing	154	**	163	171	+ 8
New	247	197	210	213	+ 3
Criminal Cases					
Investigations	100	**	100	100	0
Referrals to DOJ	36	37	38	38	0
Permit Support					
RCRA	***	NA	77	95	+ 18
NPDES	***	NA	104	104	0
UIC	***	NA	659	624	- 35

* No Interdisciplinary action, see specific media for these outputs.

** Numbers are not comparable due to change in definition of output.

*** No Regional support was provided in 1985.

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Intermedia Programs

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Technical Information & Liaison								
Salaries & Expenses		$1,948.4	$1,795.0	$1,786.7	-$76.8	$1,709.9	$1,743.4	$33.5
Research & Development		$905.7	$847.2	$788.8	-$33.9	$754.9	$716.0	-$38.9
	TOTAL	$2,854.1	$2,642.2	$2,575.5	-$110.7	$2,464.8	$2,459.4	-$5.4
Exploratory Research Core Program - Interdisciplinary								
Salaries & Expenses		$860.8	$658.5	$655.6	-$28.1	$627.5	$538.0	-$89.5
Research & Development		$20,395.2	$13,226.1	$20,160.6	-$866.9	$19,293.7	$13,600.0	-$5,693.7
	TOTAL	$21,256.0	$13,884.6	$20,816.2	-$895.0	$19,921.2	$14,138.0	-$5,783.2
Scientific Assessment Interdisciplinary								
Salaries & Expenses		$915.4	$814.2	$814.2	-$35.0	$779.2	$782.6	$3.4
Research & Development		$236.6	$400.0	$368.7	-$15.9	$352.8	$800.0	$447.2
	TOTAL	$1,152.0	$1,214.2	$1,182.9	-$50.9	$1,132.0	$1,582.6	$450.6
Quality Assurance Management								
Salaries & Expenses		$655.8	$686.7	$686.6	-$29.5	$657.1	$809.1	$152.0
Research & Development		$638.2	$426.7	$424.7	-$18.3	$406.4	$400.0	-$6.4
	TOTAL	$1,294.0	$1,113.4	$1,111.3	-$47.8	$1,063.5	$1,209.1	$145.6
TOTAL:								
Salaries & Expenses		$4,380.4	$3,954.4	$3,943.1	-$169.4	$3,773.7	$3,873.1	$99.4
Research & Development		$22,175.7	$14,900.0	$21,742.8	-$935.0	$20,807.8	$15,516.0	-$5,291.8
Intermedia Programs	TOTAL	$26,556.1	$18,854.4	$25,685.9	-$1,104.4	$24,581.5	$19,389.1	-$5,192.4

INTERDISCIPLINARY

Intermedia Programs

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Technical Information & Liaison	22.7	17.0	16.8		16.8	16.8	
Exploratory Research Core Program - Interdisciplinary	16.5	10.0	9.9		9.9	9.9	
Scientific Assessment Interdisciplinary	14.6	16.0	16.0		16.0	14.4	-1.6
Quality Assurance Management	9.0	13.2	13.2		13.2	13.2	
TOTAL PERMANENT WORKYEARS	62.8	56.2	55.9		55.9	54.3	-1.6
TOTAL WORKYEARS							
Technical Information & Liaison	28.0	28.6	28.4		28.4	28.4	
Exploratory Research Core Program - Interdisciplinary	16.8	10.0	9.9		9.9	9.9	
Scientific Assessment Interdisciplinary	16.0	16.0	16.0		16.0	14.4	-1.6

INTERDISCIPLINARY

Intermedia Programs

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Quality Assurance Management	9.7	13.6	13.6		13.6	13.6	
TOTAL WORKYEARS	70.5	68.2	67.9		67.9	66.3	-1.6

INTERDISCIPLINARY

Intermedia Programs

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Assure Uniform Risk Assessment

- Two technical support documents for exposure assessment guidelines (Scientific Assessments)
- Final guidelines for health assessment of toxicants to male/female reproductive system (Scientific Assessments)

Objective 3. Technology Transfer

- Seminars to assist states in the regulation of toxic pollutants in air (Technical Information)
- Seminars on technologies available for beneficial use of municipal sludges (Technical Information)

Objective 4: Manage the Agency-wide Mandatory Quality Assurance Program

- Report on review of Agency Quality Assurance program plans (annual work plans and revised management plans from 42 offices and laboratories) (QA Management)
- Guidance on audits of data quality for environmental data collection activities (QA Management)

Objective 5: Manage/Implement the Exploratory Grants and Centers Program

- Solicitation for 1988 Research Grants Proposals (Exploratory Research)
- Annual Reports on Research Grants and Centers Program (Exploratory Research)
- Bibliography of Research Grant Published Articles (Exploratory Research)

Objective 6: Manage/Implement the Environmental Trends Program

- Status reports on U.S. Mussel Watch and Specimen Bank Programs (Exploratory Research)

Objective 7: Manage/Implement the Visiting Scientists Program

- Solicit and select distinguished scientists for 1988 program (Exploratory Research)

1986 PLANNED OUTPUTS

Objective 1: Assure Uniform Risk Assessment

- Proposed guidelines for assessment of pollutant effects on human fertility (Scientific Assessment)
- Final guidelines for chemical mixtures, carcinogen risk assessment, exposure assessment, mutagenicity risk assessment, and suspect developmental toxicants health assessment (Scientific Assessment)

Objective 3: Technology Transfer

- o Trial Burn Data Handbook for hazardous waste incinerator permit writers (Technical Information)
- o Seminars on the technologies available to decrease contaminant levels contained in the Office of Drinking Water Health Advisories (Technical Information)

Objective 4: Manage the Agency-wide Mandatory Quality Assurance Program

- o Report on continuing review of all Agency Quality Assurance program plans (42 offices and laboratories) (QA Management)

Objective 5: Manage/Implement the Exploratory Grants and Centers Program

- o Solicitation for 1987 Research Grant Proposals (Exploratory Research)
- o Annual reports on the Research Grants and Centers Programs (Exploratory Research)

Objective 6: Manage/Implement the Environmental Trends Program

- o Status Reports on Mussel Watch and Specimen Bank programs (Exploratory Research)

Objective 7: Manage/Implement the Visiting Scientists Program

- o Solicit and select scientists for 1987 Visiting Scientists Program (Exploratory Research)

1985 ACTUAL OUTPUTS

Objective 1: Assure Uniform Risk Assessment

- o Proposed guidelines for chemical mixtures, carcinogen risk assessment, exposure assessment, mutagenicity risk assessment, and suspect developmental toxicants health assessment (Scientific Assessment)

Objective 3: Technology Transfer

- o Revision of handbook for remedial action at waste disposal sites (Technical Information)
- o Teleconference on emergency plans for the protection of public drinking water supplies (Technical Information)

Objective 4: Manage the Agency-wide Mandatory Quality Assurance Program

- o Report on management systems audits of two Agency components (QA Management)
- o Guidance for revised Quality Assurance program plans for all Agency data collection components (QA Management)

Objective 5: Manage/Implement the Exploratory Grants and Centers Program

- o Awarded 57 research grants (Exploratory Research)
- o Received over 200 research papers (Exploratory Research)

Objective 6: Manage/Implement the Environmental Trends Program

- o Mussel Watch research plan (Exploratory Research)

Objective 7: Manage/Implement the Visiting Scientists Program

- o Selected 9 visiting scientists for the Visiting Scientists Program (Exploratory Research)

INTERDISCIPLINARY

Intermedia Programs

Budget Request

The Agency requests a total of $19,389,100 supported by 66.3 total workyears for 1987, a decrease of $5,192,400 and a decrease of 1.6 total workyears from 1986. Of the request, $3,873,100 will be for the Salaries and Expenses appropriation and $15,516,000 will be for the Research and Development appropriation.

Program Description

The Intermedia budget subactivity consists of those ORD programs which cross all media. These are Exploratory Research, Technical Information and Liaison, Quality Assurance Management, and Uniform Risk Assessment.

Objective 1: Assure Uniform Risk Assessment. This activity provides Agency-wide guidance to perform exposure and risk assessments. These guidelines are intended to ensure uniform assessments that rely on sound scientific principles and information.

Objective 2: Technical Information Product Management. This program manages the development of ORD's scientific and technical information products to ensure they are properly and efficiently planned, controlled, distributed and of high quality. This program also develops special reports as needed, supports the review of Technical Information Plans, and enforces technical information standards for ORD information products.

Objective 3: Technology Transfer. These activities support the Stevenson-Wydler Technology Innovation Act (P.L. 96-480). By providing information on available technology and technical data, states and localities are more able to meet their regulatory responsibilities.

Objective 4: Manage the Agency-wide Mandatory Quality Assurance Program. This program provides policy direction, management systems and technical guidelines for the Agency-wide mandatory quality assurance program.

Objective 5: Manage/Implement the Exploratory Grants and Centers Program. The grants program funds individual investigator-initiated research in areas of concern to the Agency through an open, competitive, peer-reviewed evaluation process. The long-term exploratory research centers will focus on multi-disciplinary research in eight topic areas. In addition, the Small Business Innovation Research program, the Senior Environmental Employment Program and the Minority Institutions Support Program are managed under this objective.

Objective 6: Manage/Implement the Environmental Trends Program. This program develops biomonitoring techniques, such as Mussel Watch and the National Pilot Specimen Bank, to identify long-term environmental trends and research needs.

Objective 7: Manage/Implement the Visiting Scientists Program. This objective develops and implements programs to strengthen and enhance the quality of the Agency's research programs through the exchange of scientists and the granting of awards for scientific achievement. The major activity is the senior Visiting Scientists program, which enables accomplished scientists to conduct research at ORD laboratories.

TECHNICAL INFORMATION AND LIAISON

1987 Program Request

The Agency requests a total of $2,459,400 supported by 28.4 total workyears for this program, of which $1,743,400 will be for the Salaries and Expenses appropriation and $716,000 will be for the Research and Development appropriation. This represents an increase of $33,500 and a decrease of $38,900, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects a reduction in technology transfer activities in order to support other research priorities.

Technical Information Product Management. In 1987, the Center for Environmental Research Information (CERI) will continue to be the central point for all ORD information products. It will track, process, and distribute all ORD reports, develop special reports as needed, produce all ORD project summaries and review them for policy implications. Responsibilities will continue to fall into three major categories: processing reports and journal articles to NTIS; reviewing, processing, and controlling the quality of project summaries; and printing and distributing ORD information products. In 1987, CERI estimates it will receive a slightly higher number of reports for processing to NTIS (1,700). Of these, there will be approximately 1,074 project reports, 520 journal articles and 106 miscellaneous documents.

These activities will ensure that ORD's scientific and technical information products are planned, appropriately controlled, distributed uniformly, and of high quality.

Technology Transfer. Technology Transfer is a continuing responsibility. In response to requests from the EPA program offices and the needs expressed by the regions and the States, ORD disseminates the available technology and technical data to States and localities to enable them to meet their regulatory responsibilities. In 1987, Technology Transfer activities will be carried out in support of the Stevenson-Wydler Technology Innovation Act. Activities will include the design, production, quality control, and distribution of materials such as design manuals, users' guides, handbooks, and workshops.

1986 Program

In 1986, the Agency is allocating a total of $2,464,800 supported by 28.4 total workyears for this program, of which $1,709,900 is from the Salaries and Expenses appropriation and $754,900 is from the Research and Development appropriation.

The Center for Environmental Research Information (CERI) tracks, processes and distributes all ORD reports, develops special reports as needed and produces all ORD project summaries. Technology transfer activity supports the production of technology transfer tools for the Program Offices and the Regions.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,854,100 supported by 28.0 total workyears for this program, of which $1,948,400 was from the Salaries and Expenses appropriation and $905,700 was from the Research and Development appropriation.

Major accomplishments in 1985 included a Teleconference on Emergency Plans for the Protection of Public Drinking Water Supplies. In addition, several other technology transfer manuals and handbooks were completed and 21 seminars and workshops on 6 subjects were conducted. Over 1,300 documents were processed to the National Technical Information Service, 389 project summaries were produced and distributed, and over 26,000 requests for publications were answered.

EXPLORATORY RESEARCH CORE PROGRAM

1987 Program Request

The Agency requests a total of $14,138,000 supported by 9.9 total workyears for this program, of which $538,000 will be for the Salaries and Expenses appropriation and $13,600,000 will be for the Research and Development appropriation. This represents a decrease of $89,500 and $5,693,700, respectively, and no change in total workyears. As in previous years, these reductions reflect a difference in the way that resources for the Small Business Innovation Research (SBIR) grant program are accounted for between the current year (1986) and the budget year (1987). The 1986 resources for SBIR have been consolidated in the Exploratory Research Core Program, whereas the 1987 resources are distributed to each of the media research programs. After the beginning of 1987 these resources will be consolidated in the Exploratory Research Core Program. In addition, the number of new grants awarded under the Exploratory Grants program will be reduced in order to focus resources on high priority research areas.

Manage/Implement the Exploratory Grants and Centers Program. Applications from individual investigators will continue to be received, peer reviewed and reviewed for relevance to EPA's mission. The program will emphasize: continued improvement in quality of research; coordination with the Agency's research planning process; broad dissemination of results of completed grants, and coordination with other Federal agencies. Seminars and workshops featuring the completed work of grantees will continue to be held in Agency laboratories and other locations around the country. Invitees will include interested Agency staff, peer review panelists, other grantees, science media, the general public, representatives from other Federal granting entities and interested State and local personnel.

Oversight and management of the operating centers will emphasize attention to new trends, discoveries or leads coming from ongoing studies. An annual summary report of the results obtained by each of the centers will be prepared for ongoing evaluation of the effectiveness of the center with respect to coverage of necessary areas or ability to respond to new needs. Recommendations for reorienting existing centers will be prepared when appropriate. Symposia and workshops will be held to disseminate information from center studies.

Manage/Implement the Environmental Trends Program. These resources will continue to support biomonitoring activities which include the Mussel Watch and Specimen Bank programs at the 1986 level. The U.S. Mussel Watch program is developing methods to measure the environmental status of coastal marine waters. The National Pilot Specimen Bank is developing ways to allocate, analyze and store samples of environmental concern. Both of these programs are essential components of the Agency's comprehensive long range research strategy.

Manage/Implement the Visiting Scientists Program. This program, designed to enable distinguished scientists to work in ORD laboratories, will continue as in 1986. The scientists who participate in research activities will be renowned in their fields. The Distinguished Visiting Scientists Program is ongoing and, therefore, the activities and expected accomplishments for 1987 are similar to those for 1986. Involvement of renowned scientists in the day-to-day activities of ORD laboratories will result in exchanges of information beneficial to both EPA and the scientific community and will improve the reputation and credibility of research carried out in EPA laboratories.

1986 Program

In 1986, the Agency is allocating a total of $19,921,200 supported by 9.9 total workyears for this program, of which $627,500 is from the Salaries and Expenses appropriation and $19,293,700 is from the Research and Development appropriation.

The 1986 Grants and Centers Program is continuing to award research grants and manage the academic research centers to support the Agency's long-term research needs. In addition, the environmental trends program, encompassing the U.S. Mussel Watch and the National Pilot Specimen Bank, is continuing to assist the Agency in monitoring environmental trends to better anticipate emerging environmental problems and develop strategies to address them. The Distinguished Visiting Scientists Program is continuing to enable outside scientists to either consult with or conduct research in ORD laboratories.

1985 Accomplishments

In 1985, the Agency obligated a total of $21,256,000 supported by 16.8 total workyears for this program, of which $860,800 was from the Salaries and Expenses appropriation and $20,395,200 was from the Research and Development appropriation.

In 1985, the Exploratory Research program reviewed 414 grant proposals and awarded 57 new grants and 57 continuations. The Visiting Scientists program sponsored the work of nine distinguished scientists in ORD laboratories, enabling the agency to remain in the forefront of science and strengthening EPA's scientific basis for regulatory decisions.

SCIENTIFIC ASSESSMENT

1987 Program Request

The Agency requests a total of $1,582,600 supported by 14.4 total workyears for this program, of which $782,600 will be for the Salaries and Expenses appropriation and $800,000 will be for the Research and Development appropriation. This represents an increase of $3,400 and $447,200, respectively, and a decrease of 1.6 total workyears. The increases reflect the need for further development of guidelines and support for methods development needs identified by the Risk Assessment Forum or during the preparation of existing guidelines.

Assure Uniform Risk Assessment. In 1987 this program will submit for public comment and SAB review guidelines for health assessment of toxicants to the male/female reproductive system. Two technical support documents for exposure assessment guidelines will be completed and guidelines for systemic toxicants will be proposed.

Funds will be used to operate the Risk Assessment Forum, which ensures appropriate agency-wide consistency in procedures by reviewing program office risk assessments, making recommendations for risk assessment procedures not covered by established guidelines, making recommendations on risk assessment issues, and recommending revisions to agency guidelines whenever necessary. All Forum-directed projects will be coordinated with, and complement, other Agency efforts to reduce risk assessment uncertainties.

1986 Program

In 1986, the Agency is allocating a total of $1,132,000 supported by 16.0 total workyears for this program, of which $779,200 is from the Salaries and Expenses appropriation and $352,800 is from the Research and Development appropriation.

In 1986 guidelines in areas including carcinogenicity, mutagenicity, reproductive effects, systemic effects, complex mixtures and exposure assessment are being completed, concluding the first round of risk assessment guidelines. The Agency's Risk Assessment Forum is continuing to review risk assessments at the request of senior management, as well as provide the Agency with revised and updated guidelines for producing risk assessments.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,152,000 supported by 16.0 total workyears for this program, of which $915,400 was for the Salaries and Expenses appropriation and $236,600 was for the Research and Development appropriation.

Guidelines for risk assessment and exposure assessment documents were submitted for public comment and SAB review. These guidelines, on carcinogenicity, mutagenicity, chemical mixtures, developmental toxicants and exposure, were redrafted, given provisional SAB approval and await final SAB approval.

QUALITY ASSURANCE MANAGEMENT

1987 Program Request

The Agency requests a total of $1,209,100 supported by 13.6 total workyears for this program, of which $809,100 will be for the Salaries and Expenses appropriation and $400,000 will be for the Research and Development appropriation. This represents an increase of $152,000 and a decrease of $6,400, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects enhanced support to the in-house research program and increased efforts in support of the full scale auditing program for the Agency's Quality Assurance systems.

Manage the Agency-wide Mandatory Quality Assurance Program. In 1987, all program offices, Regional offices and Agency laboratories must continue to implement quality assurance (QA) procedures consistent with Agency policy to ensure that data generated by the Agency are reliable, valid, and accurate. This program will include review of QA program plans of all regions, program offices and laboratories; QA management system audits of selected EPA offices and laboratories; selected reviews of audits performed by Agency Quality Assurance Officers; development and improvement of program-specific guidance for QA project plans; preparation of a QA status report for senior EPA management; and development of procedures for training QA officers and data collectors on the use of QA materials.

1986 Program

In 1986, the Agency is allocating a total of $1,063,500 supported by 13.6 total workyears for this program, of which $657,100 is from the Salaries and Expenses appropriation and $406,400 is from the Research and Development appropriation.

In 1986, the quality assurance activity involves the implementation and evaluation of programs to support the development within EPA of scientific data of known and acceptable quality.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,294,000 supported by 9.7 total workyears for this program, of which $655,800 was from the Salaries and Expenses appropriation and $638,200 was from the Research and Development appropriation.

In 1985 the quality assurance activity involved planning for conducting management systems audits of the regions, program offices and laboratories; developing guidance for revised quality assurance program plans for all Agency data collection activities, reviews of Agency quality assurance audits; and development of guidance for data quality objectives.

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INTERDISCIPLINARY

Environmental Review and Coordination

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Environmental Review and Coordination							
Salaries & Expenses	$4,965.9	$5,175.7	$4,927.4	-$211.8	$4,715.6	$4,851.1	$135.5
Abatement Control and Compliance	$5,492.8	$5,104.0	$5,154.0	-$221.7	$4,932.3	$3,078.4	-$1,853.9
TOTAL	$10,458.7	$10,279.7	$10,081.4	-$433.5	$9,647.9	$7,929.5	-$1,718.4
TOTAL:							
Salaries & Expenses	$4,965.9	$5,175.7	$4,927.4	-$211.8	$4,715.6	$4,851.1	$135.5
Abatement Control and Compliance	$5,492.8	$5,104.0	$5,154.0	-$221.7	$4,932.3	$3,078.4	-$1,853.9
Environmental Review and Coordination TOTAL	$10,458.7	$10,279.7	$10,081.4	-$433.5	$9,647.9	$7,929.5	-$1,718.4
PERMANENT WORKYEARS							
Environmental Review and Coordination	118.5	111.0	112.2		112.2	108.5	-3.7
TOTAL PERMANENT WORKYEARS	118.5	111.0	112.2		112.2	108.5	-3.7

INTERDISCIPLINARY

Environmental Review and Coordination

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Environmental Review and Coordination	124.7	118.2	118.2		118.2	114.5	-3.7
TOTAL WORKYEARS	124.7	118.2	118.2		118.2	114.5	-3.7

INTERDISCIPLINARY

Environmental Review and Coordination

Budget Request

The Agency requests a total of $7,929,500 supported by 114.5 total workyears for 1987, a decrease of $1,718,400 and 3.7 total workyears from 1986. Of this request, $4,851,100 will be for the Salaries and Expenses appropriation and $3,078,400 will be for the Abatement, Control and Compliance appropriation, an increase of $135,500 and a decrease of $1,853,900 respectively.

Program Description

Environmental Review and Coordination -- This activity includes four programs. National Environmental Policy Act (NEPA) Compliance contains resources for preparing EPA's Environmental Impact Statements (EISs) or, alternatively, determining Findings of No Significant Impact (FNSIs) on National Pollution Discharge Elimination System (NPDES) new source permits and municipal wastewater treatment grant actions to assure that new facilities with Federal involvement comply with NEPA. The NEPA Compliance program also provides assistance to other EPA programs in conducting functionally equivalent analyses.

Federal Facilities Compliance deals with control of pollution at Federal installations. Under Executive Order 12088, EPA is directed to: (1) provide technical advice and assistance to Federal agencies to ensure that their facilities comply with pollution control requirements in a cost effective and timely manner; (2) assist Federal agencies and the Office of Management and Budget (OMB) in developing budgetary plans for controlling pollution at Federal facilities; and (3) resolve disputes regarding Federal facilities' violations of pollution control requirements through administrative mechanisms. The Federal Facility compliance effort is a comprehensive multi-media program which works with and coordinates the individual single-media programs to establish one integrated and focused effort, enabling EPA to deal with other Federal agencies on their pollution control problems in a highly efficient and effective manner, and not through fragmented, single-media approaches.

Pursuant to NEPA and Section 309 of the Clean Air Act, the Environmental Review program reviews and comments publicly on the environmental impact of proposed projects, regulations, and other major Federal actions. This broad mandate encourages expedited environmental assessment of all Federal projects and activities. The major objective is to minimize the adverse environmental impacts of Federal proposals by: (1) effective liaison with other Federal agencies, (2) early identification of significant environmental issues, and (3) timely review of major actions.

The Indian Program coordinates the extension of EPA programs to American Indian reservations. This effort emphasizes coordination of Agency activities and support of activities designed to improve the environmental management capability of tribal governments. It includes identification of, and work on, priority tribal projects and resolution of legal, policy, and procedural problems hampering EPA's ability to work with tribal governments.

ENVIRONMENTAL REVIEW AND COORDINATION

1987 Program Request

The Agency requests a total of $7,929,500 supported by 114.5 total workyears for this program, of which $4,851,100 will be for the Salaries and Expenses appropriation and $3,078,400 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $135,500 in Salaries and Expenses, a decrease of $1,853,900 in Abatement, Control and Compliance, and a decrease of 3.7 total workyears. The increase is for increased support costs and the decrease reflects a reduction in NEPA compliance activity.

Efforts will continue to be directed toward ensuring that EPA complies with its NEPA requirements. In 1987, the Agency expects a decline in NEPA compliance activity, as only ongoing construction grant projects will be funded in 1987. The request includes only those extramural resources necessary to complete ongoing projects and to support analyses for phased, segmented projects. The request supports expected increases in the NPDES area due to the issuance of new source performance standards for oil and gas production facilities on the Outer Continental Shelf. An increase in the demand for NEPA compliance resources in conducting functionally equivalent analyses, particularly in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Toxic Substances Control Act (TSCA) areas is also expected.

The Agency will place increased emphasis on advice to Federal agencies on pollution control methods and requirements, compliance monitoring, and dispute resolution under Executive Order 12088. Particular emphasis will be placed on hazardous waste problems on Federal installations in cooperation with the Office of Solid Waste and Emergency Response. The Agency will continue to review and comment on draft and final EISs and improve coordination with other Federal agencies with respect to the Section 309 and NEPA review processes. Finally, the Agency will strengthen overall "outreach" with tribal groups. The office will continue implementation of the Agency's Indian program, through technical support and consultation designed to strengthen the environmental management capabilities of tribal governments. Principal emphasis will be placed on evaluating prototype technical and institutional solutions to environmental problems on tribal lands.

1986 Program

In 1986, the Agency is allocating a total of $9,647,900 supported by 118.2 total workyears for this program, of which $4,715,600 is from the Salaries and Expenses appropriation and $4,932,300 is from the Abatement, Control and Compliance appropriation. In 1986, the NEPA Compliance program is increasing emphasis on oversight of State programs which are doing much of the basic environmental analysis. EPA is also continuing work on site-specific assessments and EISs, and increasing efforts in conducting functionally equivalent analyses especially in the hazardous and toxic waste areas. The Agency is continuing to assist Federal agencies in identifying facilities needing pollution controls, determining the most cost effective control, and resolving disputes surrounding facilities which are out of compliance. The Agency is also continuing to work on the review of environmental impacts of proposed projects, regulations, and other major Federal actions, as required by both the NEPA and Section 309. The major objective is to minimize the adverse environmental impacts of Federal proposals by: (1) effective liaison with other Federal agencies; (2) early identification of significant environmental issues ; and (3) timely review of major actions. In 1986, the program is working to improve the environmental management capability of tribal governments, which includes increased outreach and technical assistance to tribal governments and resolution of legal, policy, and procedural problems hampering EPA's ability to work with tribal governments.

1985 Accomplishments

In 1985, the Agency obligated a total of $10,458,700 supported by 124.7 workyears for this program, of which $4,965,900 was from the Salaries and Expenses appropriation and $5,492,800 was from the Abatement, Control and Compliance appropriation. In 1985, this program consisted of two program elements, NEPA Compliance and Federal Facilities Compliance. The NEPA Compliance program prepared EISs and FNSIs as required in connection with construction grants and NPDES projects; conducted overviews of related state activities; and provided assistance to other programs in conducting functionally equivalent analyses. The Agency continued its efforts to provide technical advice and assistance to Federal agencies to ensure that their facilities comply with pollution control requirements in a cost effective manner; to review and comment on proposed actions of other Federal agencies' actions to ensure that public health and the environment was protected; to improve liaison with other Federal agencies, and to identify and resolve environmental concerns on Indian lands. In 1985, the Agency adopted and began implementation of an Indian Policy.

INTERDISCIPLINARY

Interdisciplinary Training Grants

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Interdisciplinary Training Grants								
Abatement Control and Compliance		$458.4		$550.0	-$23.7	$526.3		-$526.3
	TOTAL	$458.4		$550.0	-$23.7	$526.3		-$526.3
TOTAL:								
Abatement Control and Compliance		$458.4		$550.0	-$23.7	$526.3		-$526.3
Interdisciplinary Training Grants	TOTAL	$458.4		$550.0	-$23.7	$526.3		-$526.3

INTERDISCIPLINARY

Interdisciplinary Training Grants

Budget Request

The Agency requests no resources for this activity in 1987.

Program Description

This program encouraged academic training in the environmental sciences by providing economic support, through fellowships and training grants, to students who are interested in entering this field. This program is being phased out in 1986.

INTERDISCIPLINARY TRAINING GRANTS

1987 Program Request

The Agency is not requesting funding for this activity in 1987.

1986 Program

In 1986, the Agency is allocating a total of $526,300 for this program within the Office of Research and Development (ORD), all of which is for the Abatement, Control and Compliance appropriation. Resources are being used to begin the phase-out of this program.

1985 Accomplishments

In 1985, the Agency obligated a total of $458,400 to this program within the Office of Research and Development all of which was for the Abatement, Control and Compliance appropriation. The program funded 41 minority fellowships.

INTERDISCIPLINARY

Interdisciplinary Technical Assistance

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
EPA Disaster Assistance								
Salaries & Expenses		$10.0						
	TOTAL	$10.0						
TOTAL:								
Salaries & Expenses		$10.0						
Interdisciplinary Technical Assistance	TOTAL	$10.0						
PERMANENT WORKYEARS								
EPA Disaster Assistance		.2						
TOTAL PERMANENT WORKYEARS		.2						
TOTAL WORKYEARS								
EPA Disaster Assistance		.2						
TOTAL WORKYEARS		.2						

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INTERDISCIPLINARY

Enforcement Policy & Technical Support

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Technical Support Office of Enforcement And Compliance Monitoring								
Salaries & Expenses		$3,478.3	$3,277.9	$3,137.0	-$134.7	$3,002.3	$3,064.1	$61.8
Abatement Control and Compliance		$1,547.6	$1,705.3	$1,705.3	-$73.4	$1,631.9	$1,705.3	$73.4
	TOTAL	$5,025.9	$4,983.2	$4,842.3	-$208.1	$4,634.2	$4,769.4	$135.2
Enforcement Policy & Operations								
Salaries & Expenses		$12,671.4	$12,699.0	$13,796.4	-$593.2	$13,203.2	$13,475.4	$272.2
Abatement Control and Compliance		$309.4	$350.0	$350.0	-$15.1	$334.9	$350.0	$15.1
	TOTAL	$12,980.8	$13,049.0	$14,146.4	-$608.3	$13,538.1	$13,825.4	$287.3
Criminal Investigation Program								
Salaries & Expenses				$966.8	-$41.6	$925.2	$1,961.5	$1,036.3
	TOTAL			$966.8	-$41.6	$925.2	$1,961.5	$1,036.3
TOTAL:								
Salaries & Expenses		$16,149.7	$15,976.9	$17,900.2	-$769.5	$17,130.7	$18,501.0	$1,370.3
Abatement Control and Compliance		$1,857.0	$2,055.3	$2,055.3	-$88.5	$1,966.8	$2,055.3	$88.5
Enforcement Policy & Technical Support	TOTAL	$18,006.7	$18,032.2	$19,955.5	-$858.0	$19,097.5	$20,556.3	$1,458.8

INTERDISCIPLINARY

Enforcement Policy & Technical Support

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Technical Support Office of Enforcement And Compliance Monitoring	49.7	66.4	65.4		65.4	62.5	-2.9
Enforcement Policy & Operations	251.3	257.4	279.2		279.2	284.0	4.8
Criminal Investigation Program			25.0		25.0	35.0	10.0
TOTAL PERMANENT WORKYEARS	301.0	323.8	369.6		369.6	381.5	11.9
TOTAL WORKYEARS							
Technical Support Office of Enforcement And Compliance Monitoring	61.5	66.4	65.4		65.4	62.5	-2.9
Enforcement Policy & Operations	276.1	268.7	291.7		291.7	291.7	
Criminal Investigation Program			25.0		25.0	35.0	10.0
TOTAL WORKYEARS	337.6	335.1	382.1		382.1	389.2	7.1

INTERDISCIPLINARY

Enforcement Policy and Technical Support

Budget Request

The Agency requests a total of $20,556,300 supported by 389.2 total workyears for 1987, an increase of $1,458,800 and 7.1 total workyears from 1986. Of the request $18,501,000 will be for the Salaries and Expenses appropriation and $2,055,300 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $1,370,300 in the Salaries and Expenses appropriation and $88,500 in the Abatement, Control and Compliance appropriation.

Program Description

The program areas under this subactivity include:

Technical Support - Office of Enforcement and Compliance Monitoring -- The National Enforcement Investigations Center (NEIC) provides Headquarters and Regional Offices with technical support for litigation development in nationally managed cases; cases with precedential implications; criminal cases; cases with multi-Regional impacts; cases involving unique technological requirements and complexity; and cases which exceed a Region's capability and resources. NEIC plans, develops, and provides technical assistance for civil and criminal cases under all statutes administered by the Agency.

Enforcement Policy and Operations -- This program element provides the legal enforcement and compliance monitoring component of Agency enforcement programs in all non-Superfund media. The Headquarters component is responsible for implementation of all aspects of legal enforcement activities in which EPA is a plaintiff and provision of consistent direction and coordination of Agency legal enforcement policies, strategies, and case development activities. In addition, the Headquarters component is responsible for oversight of the Agency's compliance efforts, including establishment of Agencywide criteria for use in the development of media-specific compliance strategies, the negotiation of compliance and enforcement commitments, and the overview of the implementation of strategies and program objectives. The Office of Enforcement and Compliance Monitoring conducts cross-media analyses of Agency compliance and enforcement activities and acts as a leader in fostering new compliance and enforcement approaches.

Regional legal resources are used to translate national priorities into a credible enforcement presence tailored to particular Regional characteristics and designed to maintain statutory compliance in the most cost-effective manner. Consultation is provided to Regional media program clients for development of effective compliance monitoring and enforcement strategies, including advice on strategies for use of administrative and judicial remedies. Emphasis is placed on timely and appropriate enforcement response to significant violations and management of ongoing caseload to achieve equitable resolution and swift return of violators to compliance. Cooperation with State enforcement agencies in pursuit of timely and appropriate enforcement remedies and maintenance of an effective Federal enforcement presence are important goals of this program.

Criminal Investigations -- This program element provides a nationally directed, Regionally implemented system for the investigation and swift prosecution of suspected criminal violators of environmental statutes. A significant objective of this program is to act as a deterrent to violation of environmental laws. The program is operated in close cooperation with comparable State activities, where they exist.

TECHNICAL SUPPORT - OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

1987 Program Request

The Agency requests a total of $4,769,400 supported by 62.5 total workyears for this program, of which $3,064,100 will be for the Salaries and Expenses appropriation and $1,705,300 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $61,800 in the Salaries and Expenses appropriation, an increase of $73,400 in the Abatement, Control and Compliance appropriation, and a decrease of 2.9 total workyears from 1986. The increases reflect increased technical support costs. The decrease in workyears reflects a shift to the criminal investigation program.

This program element covers the activities of the National Enforcement Investigations Center (NEIC) with respect to support of all non-Superfund enforcement actions. In 1987, NEIC will continue to provide case development support in nationally managed cases having precedential implications, unique technological requirements and complexity, multi-Regional impacts, and resource requirements exceeding Regional capabilities. NEIC will continue implementation of rigorous technical compliance monitoring procedures particularly with respect to groundwater contamination, air toxics, and municipal and pretreatment compliance. Efforts will continue to improve technical support to investigations and case preparation through greater access to appropriate data bases, and improved technical investigative and evidence audit support. Improved procedures for the development of cases under the Safe Drinking Water Act with particular emphasis upon protection and restoration of groundwater supplies and imminent and substantial endangerment cases under Sec. 1431 will be instituted. Emphasis will be placed on case file development and evidence audits. Priority will be afforded to investigations, cases, and remedial actions having potential for a high degree of environmental improvement. NEIC will also continue to provide technical leadership in executing field and laboratory data analyses in support of special studies involving crossmedia geographic initiatives.

1986 Program

In 1986, the Agency is allocating a total of $4,634,200 supported by 65.4 total workyears for this program, of which $3,002,300 is from the Salaries and Expenses appropriation and $1,631,900 is from the Abatement, Control and Compliance appropriation.

In 1986, NEIC's operations include the following support to media specific activities: support to civil and criminal cases potentially leading to Resource Conservation and Recovery Act (RCRA) prosecutions; development of computerized information searches for RCRA preliminary investigations, and extensive laboratory support to RCRA investigations; audit of contract performance of major Department of Defense contractors engaged in hazardous waste transportation and disposal; and provision of expert testimony in cases developed in prior years. NEIC also provides technical support in the effort to gain control of the illegal blending of hazardous wastes with domestic fuel oil burned in low temperature boilers.

NEIC support to enforcement of the Clean Water Act in 1986 involves laboratory analysis and technical expert testimony for civil and criminal actions; conduct of technical information searches for Regional investigations; support of groundwater protection by providing laboratory analysis, strategy, and policy reviews; conduct of evidence audits in support of the pretreatment initiative; provision of technical leadership in cases of large, complex municipal treatment facilities which are malfunctioning or failing to meet permit limitations; and support of field studies required by special crossmedia geographic initiatives.

NEIC support to the Clean Air Act enforcement program during 1986 includes laboratory support to enforcement cases; computerized information searches; auto tampering investigations; and laboratory support to the mobile source lead-in-gas program.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,025,900 supported by 61.5 total workyears for this program, of which $3,478,300 was from the Salaries and Expenses appropriation and $1,547,600 was from the Abatement, Control and Compliance appropriation.

In all statutory areas, case preparation activities and technical support to enforcement actions against significant violators were provided. Particular emphasis was placed on support to the RCRA program, including auditing contractor performance on hazardous waste transportation and disposal, and work on illegal fuel blending. Emissions monitoring protocols and requirements were developed and testing for violations of National Emission Standards for Hazardous Air Pollutants continued. Tampering and defect surveys were conducted. Substantial increases were provided in support to mobile source enforcement. The NEIC provided compliance evaluations, performance audit inspections, multi-media inspections, and evaluations of major publicly owned treatment works suspected of noncompliance, as well as Clean Water Act case support. Technical assistance was also provided to the pesticides and toxics enforcement efforts, with particular emphasis on PCB's and management of Confidential Business Information in TSCA case preparation.

ENFORCEMENT POLICY AND OPERATIONS

1987 Program Request

The Agency requests $13,825,400 supported by 291.7 total workyears for this program, of which $13,475,400 will be for the Salaries and Expenses appropriation and $350,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $272,200 in Salaries and Expenses and $15,100 in Abatement, Control and Compliance. There is no change in workyears. The increases reflect support to accelerated enforcement activity including additional support to swift and effective resolution of the ongoing judicial and administrative caseloads.

At Headquarters, emphasis will be placed on development and use of enforcement strategies which capture, where possible, the benefits of cross-media geographic initiatives, with particular attention to hazards most threatening to long term public health (eg. hazardous waste disposal, toxic substances and groundwater protection). Legal enforcement resources will be devoted to continued policy development, management of nationally significant cases and review of major judicial enforcement actions to insure national consistency of Agency policy and statutory interpretation. As in 1985 and 1986, Headquarters will continue expansion of its program of direct referral of certain classes of cases to the Department of Justice, to avoid any duplicative review. Monitoring and assessment of the implementation of enforcement initiatives begun in 1985 and 1986 and adjustment or elaboration of policy guidance as needed will continue (e.g. monitoring State and Federal enforcement relationships, managing the Agency strategic planning process for compliance and enforcement programs for all media, further testing of alternative dispute resolution techniques).

Headquarters will continue support to Regions in management of new and ongoing litigation through policy interpretation, selective participation in critical national cases, and management of contract resources to provide expert witnesses for resolution of civil litigation. There will be continued implementation of compliance planning and evaluation functions, with emphasis on the design of enforcement strategies and initiatives and use of special studies to assess the current effectiveness of environmental enforcement. Performance measures which gauge Federal and State success in achieving environmental results will be refined. Additionally, stewardship of the Agency's information base on judicial enforcement activity and exploration of new and better ways to use that information base will continue.

The critical Regional concern in 1987 will be management of the ongoing docket, since the consequences of delay are grave for environmental quality, and the docket has grown in both size and complexity as a result of enforcement initiatives in 1985 and 1986. Lack of vigorous action by EPA to bring cases to closure is an open invitation to a well-informed regulated community to adopt delaying tactics which both prolong environmental harm and dilute deterrent impact.

Regional resources will have as their highest priorities in 1987 timely and appropriate response to newly detected statutory violations (primarily initiation of administrative or judicial actions against significant noncompliers) and swift and effective resolution of ongoing enforcement actions. Statutory priorities will include implementation of the reauthorized RCRA, particularly in corrective action (both administrative orders and permits), continued enforcement of the National Municipal and Pretreatment Policies, underground injection control permitting and enforcement, air toxics and the consequences of ozone nonattainment in 1987, asbestos demolition and PCB's. In addition, Regional resources will support the criminal investigation program by moving appropriate cases to swift prosecutorial action.

Significant energy will be devoted to continued participation in the State Enforcement Agreements operated for their first year in 1985, with particular attention paid to carrying through on the use of timely and appropriate enforcement actions.

1986 Program

In 1986, the Agency is allocating a total of $13,538,100 supported by 291.7 total workyears for this program, of which $13,203,200 is from the Salaries and Expense appropriation and $334,900 is from the Abatement, Control and Compliance appropriation.

The thrust of this program in 1986 is the maintenance of vigorous enforcement and compliance monitoring partnerships with the States, to produce maximum environmental results with the most effective combination of national policy direction and Regional line management. Activities at Headquarters include monitoring of the State-Federal partnership in enforcement of environmental laws; maintenance of the legal policy guidance and case management for the criminal investigation program; explicit articulation and updating of national enforcement priorities and legal enforcement policies for major media programs; development and implementation of enforcement strategies and initiatives; operation of the Strategic Planning and Management System for Agency enforcement operations; management reviews of enforcement performance; and support of Regional legal enforcement activities to insure equity of treatment for the regulated community and a firm national enforcement posture.

Regional legal enforcement resources are being devoted to resolution of ongoing judicial and administrative cases, generation of civil referrals most likely to improve environmental quality through returning significant violators to compliance, and maintaining a credible presence. Regional legal staff are working closely with media and State counterparts to select appropriate strategies and choice of enforcement tools. Legal time has been devoted to careful consultation early in the compliance monitoring and enforcement process to hasten positive outcomes and avoid protracted negotiation or litigation. The result has been generation of a high number of enforcement actions which promise major compliance payoffs. To capture these payoffs, a significant increase in Regional resources is being targeted to the resolution of ongoing caseload and effective enforcement of the reauthorized RCRA. Resources are generally shifting towards administrative enforcement, particularly in the complex areas of hazardous waste and toxics. Regional legal support is also provided to the criminal investigation program.

1985 Accomplishments

In 1985, the Agency obligated a total of $12,980,800 supported by 276.1 total workyears for this program, of which $12,671,400 was from the Salaries and Expenses appropriation and $309,400 was from the Abatement, Control and Compliance appropriation.

The thrust of Headquarters resources in 1985 was further development and evaluation of enforcement and compliance monitoring strategies to produce maximum environmental results through the most effective combination of national policy direction -- Regional line management and collaboration with the States. Particular emphasis was given to policy development in areas of major statutory change, testing and expansion of new strategies to support effective case resolution, and clarification of methods for both clearly establishing enforcement goals and monitoring the status of statutory compliance nationwide. The year 1985 marked the inauguration of national operation of the criminal investigation program. This included outstationing of investigators in all ten Regions, under central direction at NEIC, coupled with legal policy guidance and case development support from Headquarters.

In 1985, Regional legal enforcement resources were devoted to vigorous judicial and administrative enforcement, with particular emphasis on generating civil referrals to bring significant noncompliers back into compliance and provide an effective deterrent. For the same reasons, active support was provided to prosecution of criminal cases in the first year of national operation of the criminal program. Substantial care was given to early consultation with media and State colleagues, to produce the most appropriate enforcement response. In additon, resources were used to support permit review and appeals in both the water and RCRA programs. In addition, considerable emphasis was placed on the continued operation of enforcement agreements with States which included clear articulation of timely and appropriate responses to violations and ground rules for Federal oversight.

CRIMINAL INVESTIGATIONS PROGRAM

1987 Program Request

In 1987, the Agency requests a total of $1,961,500 supported by 35.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $1,036,300 and 10.0 total workyears. This increase is to provide additional support for continued national operation of the program.

In 1987, the criminal investigation program will continue to operate as a national network, with particular emphasis on hazardous waste enforcement, in which area there is likely to be a significant increase in criminal activity due to the provisions of the reauthorized RCRA. The program will also stress close coordination with administrative and civil judicial enforcement initiatives, to maximize both the number of significant violators returned to compliance and the deterrent value of a Federal criminal enforcement presence. This program will continue to work closely with State criminal enforcement efforts, through the Northeast Hazardous Waste Coordinating Committee and the National Association of Attorneys General.

1986 Program

In 1986, the Agency is allocating a total of $925,200 supported by 25.0 total workyears, all of which is from the Salaries and Expenses appropriation.

In 1986, the program, is continuing its second year in operation as a national enforcement presence. Approximately 60 percent of the program's emphasis is on violations of RCRA; the water program is next with about 20 percent of the Agency's investigations, followed by toxic substances 10 percent and air 10 percent. In its second year, the program has capitalized on experience to improve on the 1985 ratio of 1 indictment in 5 investigations to approximately 1 in 3. As the courts have gained experience with cases of environmental crime, and are showing increased willingness to hand down significant fines and sentences, the program's importance as a deterrent is growing substantially.

1985 Accomplishments

In 1985, this program was included under Enforcement Policy and Operations.

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TOXIC SUBSTANCES

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$38,770.3	$39,388.9	$39,859.9	-$1,714.1	$38,145.8	$38,996.9	$851.1
Abatement Control and Compliance	$72,370.8	$28,662.9	$78,662.9	-$3,382.6	$75,280.3	$28,875.7	-$46,404.6
Research & Development	$13,463.5	$26,400.3	$24.808.5	-$1,066.4	$23,742.1	$21,455.1	-$2,287.0
TOTAL, Toxic Substances	$124,604.6	$94,952.1	$143,331.3	-$6,163.1	$137,168.2	$89,327.7	-$47,840.5
PERMANENT WORKYEARS	767.3	796.6	804.8		804.8	792.5	-12.3
TOTAL WORKYEARS	852.2	856.3	865.0		865.0	858.2	-6.8
OUTLAYS	$84,562.6	$94,151.1	$125,687.4	-$2.911.3	$122.776.1	$128,594.4	$5,818.3
AUTHORIZATION LEVELS	Authorization for the Toxic Substances Control Act expired September 30, 1983, and reauthorization is pending						

TOXIC SUBSTANCES

OVERVIEW AND STRATEGY

Enacted in 1976, the Toxic Substances Control Act (TSCA) provides the Agency with a comprehensive set of authorities through which to deal with all aspects of a chemical's lifecycle. TSCA's provisions cover over 60,000 existing chemicals already in commerce when TSCA was passed and all new chemicals manufactured since the establishment of the TSCA Inventory of Chemical Substances in 1979.

Initially, the establishment of programs to evaluate the risks and benefits of new products took precedence over the establishment of programs to evaluate existing products. In 1984, the emphasis began to shift toward dealing with the many complex existing chemical problems. The existing chemicals review process has about 85 existing chemicals, as well as several existing chemical categories encompassing many more chemicals, in some stage of problem characterization, information gathering, risk assessment, or risk management.

The 1987 budget request continues to recognize the need to address risks posed by existing chemicals while maintaining an effective new chemical program. In 1987, six major activities will be emphasized; 1) reducing existing chemical risks, 2) crossmedia environmental problems, 3) adressing asbestos hazards, 4) new chemical reviews, 5) compliance monitoring of existing regulations, and 6) research and development.

Reduce Significant Risks From Existing Chemicals

The single overriding priority of the 1987 toxic substances program will be the emphasis given to reducing significant risks from existing chemicals. This emphasis is reflected in the Agency's 1987 priority list where the reduction of risks from existing pesticides and existing industrial chemicals is the highest priority. The Agency will address existing chemical problems using an EPA-wide multi-statute approach in which TSCA may in some cases be the key information gathering and analysis tool. In some cases, TSCA Section 6 or Section 9 may be the most effective authority to deal with the problem; in other cases, other EPA statutes may be the remedy of choice. In the toxic substances program, we will expand the category approach to all aspects of the existing chemical program--testing, information gathering, evaluation, and risk management. By looking at categories of existing chemicals, we can better address the risks of potential substitutes for problem chemicals, take actions that are equitable for all chemicals in that category (both new and existing), and reduce the backlog of existing chemicals awaiting action.

Support Important Cross-Media Environmental Problems

There will be greater use of TSCA to support regulations controlling human exposure to harmful chemicals taken under other programs. Consideration of the information gathering and analysis needs of other offices will be an integral part of TSCA activities. TSCA will support the Agency's groundwater efforts with emphasis on volatile organic compounds, fertilizers, and septic tank discharges. We will also continue support to the Agency's acutely toxic chemicals program by using TSCA authorities and providing chemical expertise to update the list of acutely toxic chemicals and chemical profiles published in 1986.

Address Hazards From Asbestos

The focus of the asbestos program in 1987 will be on providing technical assistance to school officials, abatement contractors, architects, and engineers, and helping to ensure adequate training and certification of contractors involved in school asbestos abatement projects. The technical assistance program operating principally through EPA's Regional offices, will be maintained and we will continue to work with States in developing State asbestos abatement contractor certification programs. Five information and training centers will be in operation.

Prevent Risks From New Chemical Substances

In 1987, our emphasis in the new chemicals program will be on continuing to operate a careful and efficient premanufacture review program that is responsive to the workload demands generated by industry's submission of notices. We expect to receive about 1800 new chemical notices, the same level as 1986. There was a significant increase in notices between 1984 and 1985 from 1200 to over 1700. This increase was accommodated through productivity improvements in logging notices, in the review process, and in the automation of information. We are now beginning to receive test results on new chemicals from past voluntary testing agreements and Section 5(e) orders requiring manufacturers to perform testing. It will be necessary to begin evaluation of this data to determine if additional action is necessary. There will be increased attention to coordinating new chemical reviews and actions with other programs to ensure that decisions are consistent across the Agency and that future environmental problems (e.g., air, water, disposal) are prevented. New chemical actions will also be closely coordinated with the existing chemical program.

Ensure Compliance with Toxic Substances Regulations

The major objective of the Toxic Substances enforcement program in 1987 is to maintain an efficient and effective national compliance monitoring program with appropriate coverage of all TSCA regulations. The enforcement program depends heavily upon the assistance of State agencies which conduct compliance monitoring inspections under the terms of cooperative enforcement agreements. The number of participating States will remain at the 1986 level of 17; State programs will continue to emphasize compliance monitoring of the asbestos-in-schools and PCB regulations as well as newer rules such as the PCB transformer fires rule and the asbestos worker protection rule. The Agency will also continue to emphasize laboratory inspections and data audits, which help assure the integrity of scientific testing data submitted to the Agency.

Research and Development

The 1987 Toxic Substances Research and Development budget request includes resources to continue the development of information on the health and environmental effects of toxic chemicals, provide information on special human data needs, perform research on structure activity relationship, extrapolation, dosimetry, biological markers and on environmental risk assessment. Exposure monitoring research will also continue. Transport, fate, and field validation efforts will continue to provide information on the changes in and movement of chemicals in the environment. In 1987, the biotechnology research program will be augmented to provide additional information on the effects of genetically engineered organisms. Finally, support services will be continued for quality assurance, reference materials, and risk and exposure assessment.

TOXIC SUBSTANCES

PROGRAM ACTIVITIES	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
Incremental Outputs					
Toxics Integration					
Intermedia Priority Pollutant Documents Produced...........	3	3	2	2	-
Existing Chemical Review					
Substantial Risk Notices/FYI's Received.....................	439	400	400	400	-
Test Studies Received..........	118	200	170	170	-
Chemical-Specific Evaluations Underway.....................	83	85	85	85	-
Category Evaluations Underway..	0	2	2	3	+1
Section 6 Rules: Proposed......	2	11	4	3	-1
Section 5 SNUR: Proposed......	2	0	3	3	-
Section 8 Rules: Proposed/Final	25	21	15	15	-
New Chemical Review					
No. of New Chemicals Subject to Proposed SNURs............	19	10	10	10	-
Toxic Substances Enforcement					
Laboratory Inspections.........	26	25	45	45	-
Test Study Audits..............	122	65	95	95	-
Inspections, Section 5.........	336	320	320	320	-
Inspections, Section 6:					
PCB Inspections *............	1,616	2,460	2,500	2,500	-
Asbestos Inspections **........	2,019	3,600	2,505	2,175	-
Inspections, Section 8.........	494	340	340	340	-
Inspections, Section 13........	586	-	700	700	-
Notices of Violation...........	1,136	2,269	1,430	1,350	-80
Administrative Orders..........	733	611	800	750	-50
Civil Litigation...............	6	20	6	6	-
Criminal Litigation............	2	9	2	2	-
Cumulative Outputs					
Chemical Testing					
Initial ITC Actions............	81	92	93	101	+8
Post-Initial ITC Actions.......	41	46	54	58	+4
Promulgated ITC Actions........	0	0	2	17	+15
Other Testing Actions..........	3	2	6	11	+5
Test Guidelines/GLPs Published.	94	96	98	100	+2
Existing Chemical Review					
Chemical Advisories...........	6	15	8	10	+2
Section 6 Rules: Final........	13	18	16	19	+3
Section 9 Referrals...........	1	7	4	6	+2
Section 5 SNURs: Final.......	0	0	3	6	+3
PCB Disposal Permits Reviewed.	31	42	41	51	+10

	Actual 1985	Budget Estimate 1986	Current Estimate 1986	Estimate 1987	Increase (+) Decrease (-) 1987 vs. 1986
Cumulative Outputs					
New Chemical Review					
New Notices Received***.......	6,301	6,701	8,101	9,901	+1,800
PMN Control Actions Taken****.	465	555	585	705	+120
No. of New Chemicals Subject to Final SNURs..............	14	32	29	44	+15

* Includes Federal and anticipated State inspections.

** Includes Federal, contract, and anticipated State inspections.

*** Includes exemption notices.

**** Includes PMNs withdrawn in light of EPA concerns, voluntary testing and voluntary controls.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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TOXIC SUBSTANCES

Chemical Testing & Assessment

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Scientific Assessment - Chemical Testing & Assessment - Toxic Substances								
Salaries & Expenses		$151.2	$224.6	$224.6	-$9.7	$214.9	$209.7	-$5.2
Research & Development		$41.0	$522.6	$481.8	-$20.6	$461.2	$213.0	-$248.2
	TOTAL	$192.2	$747.2	$706.4	-$30.3	$676.1	$422.7	-$253.4
Monitoring Systems & Quality Assurance - Chemical Testing & Assessment-Toxic Substances								
Salaries & Expenses		$1 521.7	$1,504.3	$1,455.9	-$62.6	$1,393.3	$1,455.9	$62.6
Research & Development		$3,384.2	$4,645.7	$4,503.4	-$193.6	$4,309.8	$4,381.1	$71.3
	TOTAL	$4,905.9	$6,150.0	$5,959.3	-$256.2	$5,703.1	$5,837.0	$133.9
Health Effects - Chemical Testing and Assessment-Toxic Substances								
Salaries & Expenses		$3,398.5	$3,849.6	$3,868.0	-$166.3	$3,701.7	$3,402.0	-$299.7
Research & Development		$6,772.8	$10,883.8	$9,606.7	-$413.1	$9,193.6	$8,680.0	-$513.6
	TOTAL	$10,171.3	$14,733.4	$13,474.7	-$579.4	$12,895.3	$12,082.0	-$813.3
Environmental Engineering & Technology - Chemical Testing & Assessment-Toxic Substances								
Salaries & Expenses		$592.9	$535.6	$632.8	-$27.2	$605.6	$618.4	$12.8
Research & Development		$378.9	$3,200.0	$2,872.2	-$123.4	$2,748.8	$2,575.0	-$173.8
	TOTAL	$971.8	$3,735.6	$3,505.0	-$150.6	$3,354.4	$3,193.4	-$161.0

TOXIC SUBSTANCES

Chemical Testing & Assessment

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Environmental Processes & Effects - Chemical Testing and Assessment-Toxic Substances							
Salaries & Expenses	$5,830.3	$5,539.6	$5,495.6	-$236.3	$5,259.3	$5,288.9	$29.6
Research & Development	$2,886.6	$7,148.2	$7,344.4	-$315.7	$7,028.7	$5,606.0	-$1,422.7
TOTAL	$8,716.9	$12,687.8	$12,840.0	-$552.0	$12,288.0	$10,894.9	-$1,393.1
TOTAL:							
Salaries & Expenses	$11,494.6	$11,653.7	$11,676.9	-$502.1	$11,174.8	$10,974.9	-$199.9
Research & Development	$13,463.5	$26,400.3	$24,808.5	-$1,066.4	$23,742.1	$21,455.1	-$2,287.0
Chemical Testing & Assessment TOTAL	$24,958.1	$38,054.0	$36,485.4	-$1,568.5	$34,916.9	$32,430.0	-$2,486.9
PERMANENT WORKYEARS							
Scientific Assessment - Chemicals Testing & Assessment - Toxic Substances	2.9	3.0	3.5		3.5	3.5	
Monitoring Systems & Quality Assurance - Chemical Testing & Assessment-Toxic Substances	23.1	23.7	23.7		23.7	23.7	
Health Effects - Chemical Testing and	47.4	60.0	65.1		65.1	54.6	-10.5

TOXIC SUBSTANCES

Chemical Testing & Assessment

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
Assessment Toxic Substance							
Environmental Engineering & Technology - Chemical Testing & Assessment Toxic Substances	9.1	10.5	10.0		10.0	10.0	
Environmental Processes & Effects - Chemical Testing and Assessment Toxic Substances	91.3	88.2	85.2		85.2	85.7	0.5
TOTAL PERMANENT WORKYEARS	173.8	185.4	187.5		187.5	177.5	-10.0
TOTAL WORKYEARS							
Scientific Assessment - Chemicals Testing & Assessment - Toxic Substances	3.3	4.0	4.0		4.0	4.0	
Monitoring Systems & Quality Assurance - Chemical Testing & Assessment-Toxic Substances	24.5	26.7	26.7		26.7	26.7	
Health Effects - Chemical Testing and Assessment Toxic Substances	55.4	65.1	65.1		65.1	62.6	-2.5

TOXIC SUBSTANCES

Chemical Testing & Assessment

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Environmental Engineering & Technology - Chemical Testing & Assessment-Toxic Substances	10.7	10.5	11.3		11.3	11.3	
Environmental Processes & Effects - Chemical Testing and Assessment-Toxic Substances	100.2	93.8	93.3		93.3	91.8	-1.5
TOTAL WORKYEARS	194.1	200.1	200.4		200.4	196.4	-4.0

TOXIC SUBSTANCES

Chemical Testing and Assessment

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Develop and Validate Test Methods for TSCA Studies

- o Journal article on avian detection and discrimination of chemicals in feed (Env. Processes)
- o Report on application of analytical methods for detecting organic compounds in biological tissues (Monitoring)
- o Journal article on analyses of azo dyes (Monitoring)

Objective 2: Perform Health Research on Biological Markers, Dosimetry and Extrapolation

- o Journal article on germ cell cytogenetic test systems (Health)

Objective 5: Perform Engineering Research in Support of TSCA

- o Interim program report for estimation of the potential for accidental and deliberate release and worker exposure of RDNA from fermentation process (Engineering)
- o Evaluation of plastic barrier effectiveness, glove bag removal, and localized vacuum removal of asbestos (Engineering)

Objective 6: Perform Exposure Monitoring Research

- o Interim report on pollutant sources and human exposure to toxic pollutants using Total Exposure Assessment Methodology (TEAM) data (Monitoring)

Objective 7: Develop Structure Activity Relationships Data

- o Journal article on the genotoxicity of acrylates in cultured mammalian cells (Health)

Objective 8: Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents

- o Journal article on recombination of DNA in plasmids and genomes of Bacilli (Health)

Objective 9: Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols

- o Environmental risk assessment protocols and guidelines (Sci. Assessment)

Objective 10: Provide Support Services for TSCA Studies

- o Annual report on asbestos audit program (Monitoring)

1986 PLANNED OUTPUTS

Objective 1: Develop and Validate Test Methods for TSCA Studies

- o Report on application of analytical methods for detecting organic compounds in biological tissues (Monitoring)
- o Report on techniques for effects and uptake of sediment-associated toxic chemicals by benthic marine species (Env. Processes)
- o Methods for extrapolating male rodent reproductive toxicity data to humans (Sci. Assessment)
- o Two immunotoxicity assays in animal models as part of a Tier Testing Procedures for immune effects (Health)

Objective 2: Perform Research on Biological Markers, Dosimetry and Extrapolation

- o Report on how to use newly developed predictive models for risk from asbestoform minerals (Health)
- o Review and analyze the literature for 506 selected chemicals and establish a data base to support assessment of genotoxicology (Health)

Objective 4: Perform Ecological Research Including Transport, Fate and Field Validation

- o Project report on screening model to predict body burdens to calculate risk from toxicant loads (Env. Processes)

Objective 5: Perform Engineering Research in Support of TSCA

- o Report describing technology and engineering assessments of genetically engineered organisms (Engineering)
- o Evaluations of procedures and methodology of asbestos abatement (Engineering)

Objective 6: Perform Exposure Monitoring Research

- o Evaluation and standardization of dietary exposure as part of human exposure program (Monitoring)
- o Report on development and validation procedures for total exposure multimedia models (Monitoring)

Objective 7: Develop Structure Activity Relationships Data

- o Report on how to use molecular electrostatic potential for risk assessment on chemically induced toxicity for one class of chemicals (Health)
- o Report on SAR methods to predict major metabolites of industrial chemicals (Env. Processes)

Objective 9: Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols

- o Work group project reports on environmental risk assessment (Sci. Assessment)

Objective 10: Provide Support Services for TSCA Studies

- o Annual report on asbestos audit program (Monitoring)

1985 ACTUAL OUTPUTS

Objective 1: Develop and Validate Test Methods for TSCA Studies

- o Journal article on cancer of the respiratory tract: Predisposing Factors (Health)

- Report on evaluating the effects of feeding chemicals to live prey in carnivore feeding tests (Env. Processes)

Objective 2: Perform Health Research on Biological Markers, Dosimetry and Extrapolation

- Journal article on the use of hepatocytes as an activating system of rodent whole embryo culture (Health)

Objective 4: Perform Research on Biological Markers, Dosimetry and Extrapolation

- Ground and surface water modeling users guide (Env. Processes)
- Final report on the comparison of biodegradation from microcosms to field systems (Env. Processes)

Objective 5: Perform Engineering Research in Support of TSCA

- Report on industrial process profile for environmental use for polymer processing (Engineering)
- Report on industrial process profile for environmental use for plastics and resin processing industry (Engineering)

Objective 6: Perform Exposure Monitoring Research

- Annual report of research activities and methods development at the Exposure Monitoring Test Site (EMTS) (Monitoring)
- Field report on TEAM Study Phase II (Monitoring)

Objective 7: Develop Structure Activity Relationships Data

- Report on azoreductase studies (Health)

Objective 10: Provide Support Services for TSCA Studies

- Annual report quality control sample program EPA repository for Toxic and Hazardous Materials (Monitoring)
- Annual report on asbestos audit program (Monitoring)

TOXIC SUBSTANCES

Chemical Testing and Assessment

Budget Request

The Agency requests a total of $32,430,000 supported by 196.4 total workyears for 1987, a decrease of $2,486,900 and a decrease of 4.0 total workyears from 1986. Of the request, $10,974,900 will be for the Salaries and Expenses appropriation and $21,455,100 will be for the Research and Development appropriation, decreases of $199,900 and $2,287,000, respectively.

Program Description

The Chemical Testing and Assessment research program supports the Office of Toxic Substances (OTS) by providing the scientific tools to implement the Toxic Substances Control Act (TSCA).

Objective 1: Develop and Validate Test Methods for TSCA Studies. This research develops and validates health and environmental testing protocols to be incorporated into TSCA Section 4 guidelines, risk assessment methods, and analytical methods for identifying and quantifying environmental pollutants.

Objective 2: Perform Health Research on Biological Markers, Dosimetry and Extrapolation. This effort develops methods for extrapolating from high to low doses between mammalian species to enhance risk assessment predictability and capability. Research also focuses on defining the relationships between biochemical indicators of exposure to neurotoxicants and behavioral dysfunctions.

Objective 3: Provide Information on Special Human Data Needs. This activity focuses on investigations of human populations exposed to environmental pollutants.

Objective 4: Perform Ecological Research Including Transport, Fate, and Field Validation. This research focuses on developing and conducting exposure and hazard assessments of chemicals in water, air, and multimedia environments. Work focuses on inclusion of identified transport and transformation processes, pathways of exposure, population characteristics, environmental features and hazard assessment techniques. Emphasis is being placed on improving methods and data, and on defining limits of applicability of models.

Objective 5: Perform Engineering Research in Support of TSCA. Research in this area focuses on the development of models to predict the release of and exposure to new and existing chemicals. This research addresses those classes of chemicals for which the Agency does not have adequate information on the degree to which existing control systems limit their release, resulting in more effective Pre-Manufacture Notification (PMN) decisions.

Objective 6: Perform Exposure Monitoring Research. This research establishes the environmental methods data bases and statistical tools to improve exposure monitoring for OTS. Multimedia monitoring methods, sample designs and data analysis techniques are also designed and tested to support human exposure monitoring programs for regulatory concerns about chemical mixtures.

Objective 7: Develop Structure Activity Relationships Data. These efforts develop predictive methods (structure activity relationships) to provide a tool for determining whether new chemicals pose unreasonable risk or require further testing.

Objective 8: Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. Research in this area is developing methods to assess the potential health and environmental hazards of biotechnology products. Additionally, methods are being developed to contain and destroy genetically engineered organisms from manufacturing processes.

Objective 9: Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols. This effort focuses on development of methodologies and models to determine risks posed to ecosystems by exposure to environmental pollutants. The program is currently developing environmental risk assessment protocols for both aquatic and terrestrial systems and will be used in evaluating risks from both new and existing chemicals.

Objective 10: Provide Support Services for TSCA Studies. This research provides support for risk and exposure assessment, quality assurance, dissemination of reference standards and quality assurance reagents as well as expert consultation on problems associated with the evaluation of PMN chemicals.

SCIENTIFIC ASSESSMENT

1987 Program Request

The Agency requests a total of $422,700 supported by 4.0 total workyears for this program, of which $209,700 will be for the Salaries and Expenses appropriation and $213,000 will be for the Research and Development appropriation. This represents decreases of $5,200 and $248,200, respectively, and no change in total workyears. These decreases reflect the completion of a number of assessment methods for toxics as well as the initial phase of environmental risk assessment protocols.

Develop and Validate Test Methods for TSCA Studies. The 1987 Scientific Assessment program will continue to develop assessment methods for reproductive dysfunction in humans caused by exposure to environmental chemicals.

Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols. Scientific assessment support will continue for the development of environmental risk assessment protocols for both aquatic and terrestrial ecosystems. Draft protocols developed in 1986 will be completed.

Provide Support Services for TSCA Studies. Scientific assessment support will continue for preparation, consultation and review of OTS-generated assessments of cancer, mutagenicity, adverse reproductive/developmental effects, and exposure. These activities will support decision making under TSCA (existing chemicals program, PMN review, and test guidelines development).

1986 Program

In 1986, the Agency is allocating a total of $676,100 supported by 4.0 total workyears for this program, of which $214,900 is from the Salaries and Expenses appropriation and $461,200 is from the Research and Development appropriation. The 1986 program is continuing to provide support for preparation and review of risk and exposure assessments, development of assessment methods as well as new efforts to develop protocols for environmental risk assessments. Particular emphasis is being given to the development of risk assessment procedures for low-dose exposures and metabolic pathways.

1985 Accomplishments

In 1985, the Agency obligated a total of $192,200 supported by 3.3 total workyears for this program, of which $151,200 was from the Salaries and Expenses appropriation and $41,000 was from the Research and Development appropriation. In 1985, assessment support was provided for methylene chloride, formaldehyde and dioxins. A conference was held on genetically altered viruses in the environment.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1987 Program Request

The Agency requests a total of $5,837,000 supported by 26.7 total workyears for this program, of which $1,455,900 will be for the Salaries and Expenses appropriation and $4,381,100 will be for the Research and Development appropriation. This represents increases of $62,600, and $71,300, respectively, and no change in total workyears. The increases reflect adjustments to the 1986 base as part of government-wide deficit reductions.

Develop and Validate Test Methods for TSCA Studies. Efforts will also continue to develop and evaluate biological and chemical techniques to identify and quantify pollutants in both humans and the environment. Pattern recognition procedures will be developed to identify pollutants from analytical spectra. Analytical techniques will be developed to detect pollutants in foods, and immunochemical procedures will be evaluated. This research will provide techniques for accurate monitoring of exposures to toxic chemicals. Enzyme induction bioassays will also be evaluated as indicators of human exposures to complex organic compounds. Efforts will also develop and validate effective and economical analytical methodologies for asbestos and other fibers.

Perform Exposure Monitoring Research. Research in this area will develop monitoring systems to estimate human exposure to pollutants via multiple pathways using the TEAM approach. Statistical tools and data analysis techniques will be developed to conduct surveillance and total exposure monitoring and model pollutant exposure and to produce predictive techniques in the Human Exposure Assessment Location (HEAL) project. This research will improve exposure assessment capabilities for regulatory efforts.

Provide Support Services for TSCA Studies. Monitoring and quality assurance support will continue for the production of reference standards and quality assurance reagents in environmental and biological matrices for routine monitoring systems. Quality assurance guidelines will be produced for survey design, sample collection and sample analysis and dietary exposures. Laboratory audits will be conducted and guidelines will be developed to evaluate total exposure models.

1986 Program

In 1986, the Agency is allocating a total of $5,703,100 supported by 26.7 total workyears for this program, of which $1,393,300 is from the Salaries and Expenses appropriation and $4,309,800 is from the Research and Development appropriation. The 1986 program is continuing support for exposure monitoring, developing analytical methods and providing quality assurance support and standard reference materials. Particular emphasis is being given to conducting field investigations under the HEAL project.

1985 Accomplishments

In 1985, the Agency obligated a total of $4,905,900 supported by 24.5 total workyears for this program, of which $1,521,700 was from the Salaries and Expenses appropriation and $3,384,200 was from the Research and Development apppropriation. In 1985, reports were prepared on interlaboratory evaluation of the toxicity assay, the asbestos audit program, and Phase II of the TEAM study.

HEALTH EFFECTS

1987 Program Request

The Agency requests a total of $12,082,000 supported by 62.6 total workyears for this program, of which $3,402,000 will be for the Salaries and Expenses appropriation and $8,680,000 will be for the Research and Development appropriation. This represents decreases of $299,700 and $513,600, respectively, and a decrease of 2.5 total workyears. The decreases reflect the completion of a number of test methods in support of TSCA Section 4 guidelines.

Develop and Validate Test Methods for TSCA Studies. Health research will continue to develop methodologies and bioassays to detect and characterize neurotoxicity and reproductive toxicity associated with chemical exposures. Sensitive methods will be developed to rapidly detect pulmonary carcinogens and promoters. New methods will be developed to improve the sensitivity and broad spectrum response of oncogenic cell transformation bioassays. Finally, biochemical and physiological test methods for animal and *in-vitro* studies and biochemical indicators of nervous system damage will be developed.

Perform Health Research on Biological Markers, Dosimetry and Extrapolation. Health research will provide improved methods for extrapolation from animal data to human likelihood of mutagenesis and carcinogensis along with other potential adverse health effects such as neurobehavioral, pulmonary, hepatic and reproductive activities. Efforts will also provide predictive models for dose effects of asbestiform minerals to determine dose effect response for mineral fibers such as asbestos and proposed substitutes.

Provide Information on Special Human Data Needs. This research will investigate population groups exposed to environmental contaminants which are suspect toxicants for particular organ systems to determne if biological indicators of dose and/or effects are related to environmental levels of exposure and if they are correlated to adverse effects measured by traditional methods.

Develop Structure Activity Relationships Data. Structure Activity Relationships (SAR) methods and scientific data bases will be developed which allow an accurate prediction of carcinogenic and mutagenic effects of chemicals based on structural, physiochemical, topographical, mechanistic and electronic parameters. A report on SAR pattern recognition techniques for genotoxic effects as well as a combined data base management system for predicting genotoxic effects of chemicals will be provided.

Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. Health research studies will be conducted to determine the genetic stability and function of a baculovirus expression vector in vertebrate cells. A computerized data base will be developed which compiles the known characteristics of genetically engineered biological material, and a study will be initiated on the mechanism and frequency of genetic exchange of plasmids between related *Bacillus* species.

1986 Program

In 1986, the Agency is allocating a total of $12,895,300 supported by 65.1 total workyears for this program, of which $3,701,700 is from the Salaries and Expenses appropriation and $9,193,600 is from the Research and Development appropriation. The 1986 program is continuing to provide support for the development of test methods in support of TSCA Section 4 test guidelines, and to perform research on extrapolation and biological markers. Major new initiatives are being undertaken on human exposure, reproductive toxicity, biotechnology and extrapolation research.

1985 Accomplishments

In 1985, the Agency obligated a total of $10,171,300 supported by 55.4 total workyears for this program, of which $3,398,500 was from the Salaries and Expenses appropriation and $6,772,800 was from the Research and Development appropriation. In 1985, journal articles were produced on an electrophysiological test battery for assessing the effects of exposure to toxic chemicals as well as on the use of hepatocytes as an activating system of rodent whole embryo culture.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $3,193,400 supported by 11.3 total workyears for this program, of which $618,400 will be for the Salaries and Expenses appropriation and $2,575,000 will be for the Research and Development appropriation. This represents an increase of $12,800 and a decrease of $173,800, respectively, and no change in total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects the completion of studies on release and controls of several chemicals such as azo dyes.

Perform Engineering Research in Support of TSCA. Engineering efforts will continue to develop techniques to assess the potential for toxic releases and exposures from processing and manufacturing of new chemicals, as well as assess production unit operations. Research will also provide mathematical models for predicting permeation of liquid chemicals through common polymer gloves and evaluate the degree of protection from chemicals given by various respirators. Research will be performed on the treatability of new chemicals, and alternatives will be identified and evaluated to mitigate release and exposure of specific existing chemicals. Additional research will provide necessary information on chemical releases and exposure in support of TSCA new and existing chemical control efforts.

Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. Feasibility studies will be conducted on fault tree analysis techniques for assessing the potential for release of process materials from conventional fermentation process equipment. This information will contribute to the data base on the release of genetically engineered organisms in support of the TSCA PMN review process.

1986 Program

In 1986, the Agency is allocating a total of $3,354,400 supported by 11.3 total workyears for this program, of which $605,600 is from the Salaries and Expenses appropriation and $2,748,800 is from the Research and Development appropriation. The 1986 program is continuing to develop information on release and control measures for new and existing chemicals, as well as expanding its work on the containment and destruction of genetically engineered organisms.

1985 Accomplishments

In 1985, the Agency obligated a total of $971,800 supported by 10.7 total workyears for this program, of which $592,900 was from the Salaries and Expenses appropriation and $378,900 was from the Research and Development appropriation. In 1985, a report was prepared on industrial process profiles for environmental use for polymer processing as well as on fault tree analysis techniques for assessing the potential for releases of process materials from fermentation processes.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests a total of $10,894,900 supported by 91.8 total workyears for this program, of which $5,288,900 will be for the Salaries and Expenses appropriation and $5,606,000 will be for the Research and Development appropriation. This represents an increase of $29,600 and a decrease of $1,422,700, respectively, and a decrease of 1.5 total workyears. The increase in Salaries and Expenses reflects adjustments to the 1986 base as part of government-wide deficit reductions. The decrease in Research and Development reflects the completion of a number of test methods in support of TSCA Section 4 guidelines.

Develop and Validate Test Methods for TSCA Studies. Environmental research will continue to develop and evaluate test methods for defining toxicity of chemicals to aquatic (freshwater and marine) and terrestrial species. Bioavailability tests for sediment bound toxics in freshwater and estuarine species will be developed. Methods to use fish as carcinogen and teratogen species will be validated. Finally, methods to evaluate chemical effects on egg viability in avian species will be developed and validated. Such information supports TSCA Section 4 guidelines for testing of chemicals.

Perform Ecological Research Including Transport, Fate and Field Validation. Environmental processes research will continue to provide support for TSCA activities through studies of toxicity, and fate and transport of chemicals in aquatic, terrestrial and air environments. Additional research will be designed to evaluate exposure models in laboratory model ecosystems and field situations.

Develop Structure Activity Relationships Data. Environmental processes research will include the generation of environmental fate and effects data on typical PMN chemical types, documentation of test results of PMN analogs, and development of structure activity methodologies and other estimation techniques for predicting fate and effects of chemicals.

Perform Research on Biotechnology and Microbial and Biochemical Pest Control Agents. Environmental processes research will develop methods, analytical techniques and testing protocols for estimating survival, fate and effects of genetically altered microbes and the stability within their genetic pool. Research will also determine the probable hazards associated with modified microbes used in testing or proposed for industrial application. This information will aid OTS in reviewing PMN applications for products of biotechnology. Adequate methodologies for evaluating such organisms do not currently exist.

Perform Studies on Ecotoxicity and Develop Environmental Risk Assessment Protocols. Environmental processes research will focus on the development of environmental risk assessment methodology for toxics by integrating exposure and hazardous assessment data to determine the probability of risk to important populations. Aquatic and terrestrial exposure assessment data for risk models and hazard assessment models (relating single species tests to natural population) will also be developed. Availability of environmental risk methods will substantially improve the Agency's ability to regulate chemicals under Sections 4 and 5 of TSCA.

Provide Support Services for TSCA Activities. Environmental processes efforts will continue to support OTS on complex problems associated with the evaluations of PMN chemicals, including products of biotechnology. Support for development of TSCA test rules will also continuing.

1986 Program

In 1986, the Agency is allocating a total of $12,288,000 supported by 93.3 total workyears for this program, of which $5,259,300 is from the Salaries and Expenses appropriation and $7,028,700 is from the Research and Development appropriation. The 1986 program is continuing the development of test methods in support of TSCA Section 4 guidelines, research on transport, fate and field validation, and development of structure-activity relationships data. New work is being performed on the development of environmental risk assessment methods, as well as research to determine the environmental effects of genetically engineered organisms.

1985 Accomplishments

In 1985, the Agency obligated a total of $8,716,900 supported by 100.2 total workyears for this program, of which $5,830,300 was from the Salaries and Expenses appropriation and $2,886,600 was from the Research and Development appropriation. In 1985, reports were prepared on the comparison of biodegradation from microcosms to field systems.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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TOXIC SUBSTANCES

Toxic Substances Financial Assistance

(DOLLARS IN THOUSANDS)

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
PROGRAM								
Asbestos-In-Schools-Loans And Grants								
Abatement Control and Compliance		$41,310.8		$46,000.0	-$1,978.0	$44,022.0		-$44,022.0
	TOTAL	$41,310.8		$46,000.0	-$1,978.0	$44,022.0		-$44,022.0
Asbestos-In-Schools-Program Administration								
Salaries & Expenses							$537.4	$537.4
Abatement Control and Compliance		$4,429.3		$4,000.0	-$172.1	$3,827.9	$3,500.0	-$327.9
	TOTAL	$4,429.3		$4,000.0	-$172.1	$3,827.9	$4,037.4	$209.5
TOTAL:								
Salaries & Expenses							$537.4	$537.4
Abatement Control and Compliance		$45,740.1		$50,000.0	-$2,150.1	$47,849.9	$3,500.0	-$44,349.9
Toxic Substances - Financial Assistance	TOTAL	$45,740.1		$50,000.0	-$2,150.1	$47,849.9	$4,037.4	-$43,812.5
PERMANENT WORKYEARS								
Asbestos-In-Schools-Program Administration							11.2	11.2
TOTAL PERMANENT WORKYEARS							11.2	11.2

TOXIC SUBSTANCES

Toxic Substances Financial Assistance

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
TOTAL WORKYEARS							
Asbestos-In-Schools-Program Administration						12.0	12.0
TOTAL WORKYEARS						12.0	12.0

TOXIC SUBSTANCES

Toxic Substances Financial Assistance

Budget Request

The Agency requests a total of $4,037,400 supported by 12.0 total workyears for 1987, a decrease of $43,812,500 and an increase of 12.0 total workyears from 1986. Of the request, $537,400 will be for the Salaries and Expenses appropriation and $3,500,000 will be for the Abatement, Control and Compliance appropriation, an increase of $537,400 and a decrease of $44,349,900 respectively.

Program Description

The major programs under this subactivity include:

Asbestos-in-Schools Loans and Grants -- This program provides financial assistance to public and private schools, with demonstrated financial need and asbestos hazards, for purposes of undertaking asbestos abatement projects. Funding for this program is authorized under the Asbestos School Hazard Abatement Act (ASHAA) of 1984.

Asbestos-in-Schools Program Administration -- The objective of this program is to administer a process for assessing the eligibility of applicants for financial assistance and making grants or loan awards as authorized under ASHAA. In addition to administering a loan and grant process, this program also supports programs that provide technical assistance to individuals and organizations interested in addressing asbestos hazards. Activities include providing technical advice, primarily through EPA Regional offices, working with States to develop State certification programs for asbestos abatememt contractors, and establishing regional asbestos information and training centers.

ASBESTOS-IN-SCHOOLS LOANS AND GRANTS

1987 Program Request

The Agency is not requesting additional funding to provide asbestos abatement financial assistance to schools since funding for abatement projects does not represent the most effective use of Federal resources. These activities should be the primary responsibility of State and local governments.

1986 Program

In 1986, the Agency is allocating a total of $44,022,000 for this program all of which is in the Abatement, Control and Compliance appropriation.

In 1986, loans and grants will be provided to eligible schools and school districts based on evaluations of candidate projects. EPA will use information made available from applicants and States, in addition to information collected by EPA from on-site inspections, to evaluate and select projects for funding.

1985 Accomplishments

In 1985, the Agency obligated a total of $41,310,800 all in the Abatement, Control and Compliance appropriation.

On June 6, 1985, EPA offered $45,000,000 in financial assistance under the Asbestos School Hazard Abatement Act (ASHAA) to needy schools for the purpose of undertaking asbestos abatement projects. Awards were distributed for 417 abatement projects in 340 individual schools in 198 local education agencies. These funds were appropriated in 1984 and within nine months, EPA had met the statutory deadline for issuing loan and grant offers.

Implementation of ASHAA required close coordination between Headquarters, State officials, and Regional staff. In early 1985, State officials collected, sorted, and submitted applications to EPA, providing a preliminary ranking of projects. Applications were carefully reviewed by the Agency using both hazard inspectors, who visited all selected projects before funds were released, and Headquarters staff, who evaluated these applications individually. Follow-up on funded projects will continue into 1986.

ASBESTOS-IN-SCHOOLS PROGRAM ADMINISTRATION

1987 Program Request

The Agency requests a total of $4,037,400 supported by 12.0 total workyears for this program, of which $537,400 will be for the Salaries and Expenses appropriation and $3,500,000 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $537,400 and a decrease of $327,900 respectively and an increase of 12.0 total workyears. The increases result from a transfer of resources from other programs. The decrease results from a lower requirement to start new State contractor certification programs.

In 1987, EPA will focus on the technical assistance program originally set up in 1979. We will continue to provide abatement advice, principally through the Regional offices, to school officials, abatement contractors, architects, and engineers, as well as building owners and managers. We will continue to work with State governments to expand the number of contractor certification programs to ensure adequate training and certification of contractors involved in asbestos abatement activities. Five regional information and training centers will be in operation in 1987 at the University of Kansas, Tufts University, Georgia Institute of Technology, the University of Illinois, and the University of California. We will continue to refine guidelines to assist the public in identifying situations in which asbestos-containing materials present a serious risk and which should be corrected.

1986 Program

In 1986, the Agency is allocating a total of $3,827,900 for this program all of which is from the Abatement, Control and Compliance appropriation. Salaries and Expenses and total workyears are budgeted in the Existing Chemical Review program.

The funds allocated to this program are being made available through the administrative set-aside provisions of the Asbestos School Hazard Abatement Act.

Fifteen additional State abatement contractor certification programs are being supported. Two additional information and training centers will begin operation, to make a total of five. Other training programs for asbestos abatement contractors and workers are being supported by grants to trade associations, such as the National Asbestos Council, and by training private vendors (whose courses will then be subject to EPA audit). The asbestos technical assistance program will continue to collect state-of-the-art information for dissemination through updated guidance materials. In addition, we plan to issue rules to restrict commercial uses of asbestos fibers, and to promulgate a rule to protect public employees from exposure during asbestos abatement. An efficacy study will be completed which will evaluate airborne levels of asbestos fibers before, during, and after an abatement project, both within and outside of the building structure.

1985 Accomplishments

In 1985, the Agency obligated a total $4,429,300, all of which was from the Abatement, Control and Compliance appropriation. These funds were made available through the administrative set-aside provision of the Asbestos School Hazard Abatement Act. Salaries and Expenses and total workyears were budgeted under the Existing Chemical Review program.

During 1985, EPA made substantial progress in improving its asbestos technical assistance program. Three information and training centers were opened in Atlanta, Boston, and Kansas City. A model asbestos abatement training course was developed and distributed to every state. Grants to 12 States were awarded to support establishment of contractor certification programs. Several new guidance documents were issued including EPA's major document on the identification and control of asbestos in buildings; a document for maintenance and custodial employees; and guidance for the collection of bulk samples in buildings. Finally, EPA began work on identifying and supporting good sources of training for abatement contractors, architects, engineers, and others who are concerned with proper identification and control of asbestos in buildings.

TOXIC SUBSTANCES

Toxic Substances Strategies

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Toxics Integration								
Salaries & Expenses		$681.2	$624.0	$624.0	-$26.9	$597.1		-$597.1
Abatement Control and Compliance		$1,064.4	$731.1	$731.1	-$31.4	$699.7		-$699.7
	TOTAL	$1,745.6	$1,355.1	$1,355.1	-$58.3	$1,296.8		-$1,296.8
Chemical Testing								
Salaries & Expenses		$5,095.0	$3,891.9	$3,891.9	-$167.4	$3,724.5	$3,912.5	$188.0
Abatement Control and Compliance		$7,677.9	$4,908.3	$4,908.3	-$211.1	$4,697.2	$4,008.3	-$688.9
	TOTAL	$12,772.9	$8,800.2	$8,800.2	-$378.5	$8,421.7	$7,920.8	-$500.9
Existing Chemical Review								
Salaries & Expenses		$7,116.5	$7,885.7	$7,964.7	-$342.5	$7,622.2	$7,856.4	$234.2
Abatement Control and Compliance		$9,599.8	$10,760.3	$10,760.3	-$462.7	$10,297.6	$10,104.8	-$192.8
	TOTAL	$16,716.3	$18,646.0	$18,725.0	-$805.2	$17,919.8	$17,961.2	$41.4
New Chemical Review								
Salaries & Expenses		$8,634.7	$9,126.0	$9,051.0	-$389.3	$8,661.7	$9,043.3	$381.6
Abatement Control and Compliance		$5,534.7	$7,637.7	$7,637.7	-$328.4	$7,309.3	$7,237.1	-$72.2
	TOTAL	$14,169.4	$16,763.7	$16,688.7	-$717.7	$15,971.0	$16,280.4	$309.4
TOTAL:								
Salaries & Expenses		$21,527.4	$21,527.6	$21,531.6	-$926.1	$20,605.5	$20,812.2	$206.7
Abatement Control and Compliance		$23,876.8	$24,037.4	$24,037.4	-$1,033.6	$23,003.8	$21,350.2	-$1,653.6
Toxic Substances Strategies	TOTAL	$45,404.2	$45,565.0	$45,569.0	-$1,959.7	$43,609.3	$42,162.4	-$1,446.9

TOXIC SUBSTANCES

Toxic Substances Strategies

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
PERMANENT WORKYEARS							
Toxics Integration	9.7	8.0	8.0		8.0		-8.0
Chemical Testing	103.0	81.0	81.0		81.0	80.0	-1.0
Existing Chemical Review	149.8	168.6	170.1		170.1	166.6	-3.5
New Chemical Review	188.2	195.6	195.6		195.6	194.6	-1.0
TOTAL PERMANENT WORKYEARS	450.7	453.2	454.7		454.7	441.2	-13.5
TOTAL WORKYEARS							
Toxics Integration	12.1	12.8	12.8		12.8		-12.8
Chemical Testing	109.0	86.0	86.0		86.0	86.0	
Existing Chemical Review	171.6	179.1	180.6		180.6	178.6	-2.0
New Chemical Review	207.0	209.6	209.6		209.6	209.6	
TOTAL WORKYEARS	499.7	487.5	489.0		489.0	474.2	-14.8

TOXIC SUBSTANCES

Toxic Substances Strategies

Budget Request

The Agency requests a total of $42,162,400 supported by 474.2 total workyears for 1987, a decrease of $1,446,900 and 14.8 total workyears from 1986. Of the request, $20,812,200 will be for the Salaries and Expenses appropriation and $21,350,200 will be for the Abatement, Control and Compliance appropriation, an increase of $206,700 and decrease of $1,653,600 respectively.

Program Description

The program areas under this subactivity include:

Toxics Integration -- The major objective of the Toxics Integration program was to aid the Agency in formulating policy and making decisions concerning toxic chemicals in a technically sound and consistent manner. This function was performed by a small staff which provided overview of activities conducted in the Office of Toxic Substances (OTS) and coordinated information exchange within the Agency on these activities. As a result of a 1985 reorganization in the Office of Toxic Substances, these responsibilities, resources, and functions were dispersed throughout the three major TSCA programs. This will allow necessary integration activities to be directly linked with the specific programs they support. The Toxics Integration program element is eliminated in 1987; however, the activities are integrated as appropriate into the three major TSCA program elements.

Chemical Testing -- The Chemical Testing program is the focal point for developing and accumulating data on existing chemicals. Section 4 of TSCA allows EPA to require testing of specific chemicals or mixtures when insufficient data is available to determine health and environmental effects. This testing decision is based on a determination that a chemical may pose an unreasonable risk or that it is produced in substantial quantities which may result in significant human exposure or environmental release.

EPA must respond within one year to the Interagency Testing Committee's (ITC) lists of chemicals designated for priority testing consideration. Those lists are published twice yearly. While ITC testing designations are given priority consideration, EPA can require testing on other chemicals of concern. The testing program emphasizes the importance of obtaining test data as quickly as possible and ensuring that data is of high quality and defensible for regulatory purposes. This requires the publication of acceptable test methodologies and good laboratory practices as well as conducting a comprehensive laboratory/data audit program.

Existing Chemical Review -- The Existing Chemical Review program encompasses the more than 60,000 chemicals in commerce when TSCA was passed and all new chemicals manufactured since then. There are some 63,000 chemicals now listed on the TSCA Inventory of Chemical Substances. The goal of the program is to reduce significant risks to society from these chemicals. To accomplish this EPA (1) looks at known information on existing chemicals, (2) determines whether there might be a problem associated with the chemical, (3) assesses the magnitude of the problem, (4) decides what to do about it, and (5) translates the solution into action. This process of evaluating a chemical's risks as it moves through the review cycle is referred to as the existing chemical program.

TSCA authority over existing chemicals is broad. It includes Section 4, which allows EPA to order testing: Section 8, which permits us to gather information which is already available to manufacturers and processors; Section 6, which allows us to control a chemical at any stage in its life cycle or ban it completely; and Section 9, which requires us to refer a chemical to another regulatory Agency if we determine that the agency has adequate authority. The significant new use provisions of Section 5, as well as non-regulatory chemical advisories are also used to address certain existing chemical problems.

New Chemical Review -- The New Chemical Review program reflects the preventive philosophy of TSCA by reviewing the potential effects of all new chemicals before they are manufactured or imported. Manufacturers and importers are required to submit to the Agency a 90-day advance notification of their intent to manufacture or import a new chemical substance. The objective of the program is to conduct meaningful reviews on all new chemical notices and take prompt action on those that require additional data or pose concerns potentially warranting control. The Section 5(h)(4) exemption provision allows EPA to exclude low risk chemicals from full review requirements. The authorities of Section 5(a)(2) enable the Agency to extend Section 5 coverage to protect against risks as new chemicals develop.

EPA imposes a variety of control actions on new chemicals of concern. These actions include voluntary actions on the part of the submitter, withdrawal of the notice, and issuance of Section 5(e) and 5(f) orders. Section 5(e) orders are issued when inadequate data are available to evaluate the health and environmental risks posed by a new chemical and when the chemical "may present" an unreasonable risk or will be produced in substantial quantity and will have substantial human exposure or environmental release. The majority of these orders are made with the "consent" of the PMN submitter and result in limited manufacture of the substance, albeit with restrictions, until more definitive information is obtained. The authority of Section 5(f) is invoked when a chemical is found to present an unreasonable risk. This may result in the promulgation of an immediately effective Section 6(a) rule which bans production of the chemical.

TOXICS INTEGRATION

1987 Program Request

The Agency is not requesting any dollars or total workyears for this program element in 1987. This represents decreases of $597,100 in the Salaries and Expenses appropriation and $699,700 in the Abatement, Control and Compliance appropriation and a decrease of 12.8 total workyears. Toxics Integration program activities and functions will be transferred to the Existing Chemical Review, Chemical Testing and New Chemical Review programs in 1987.

1986 Program

In 1986, the Agency is allocating a total of $1,296,800 supported by 12.8 total workyears for this program, of which $597,100 is from the Salaries and Expenses appropriation and $699,700 is from the Abatement, Control and Compliance appropriation.

The program continues to emphasize identification and coordination of cross-media chemical issues and efforts to increase the utility of TSCA-generated data, risk and exposure assessment tools, and TSCA authorities both within EPA and with other Federal agencies. TSCA information exchange with other EPA offices, States, Regions, other Federal agencies and international organizations will continue.

State activities are coordinated through the National Governor's Association and other organizations, while Federal agency activities are being coordinated through a variety of mechanisms. International information exchange occurs through participation in the International Program on Chemical Safety, the International Register of Potentially Toxic Chemicals and the Organization for Economic Cooperation and Development Switchboard program. Shared information includes data collected under Section 4 testing and Section 8 information gathering as well as other technical and scientific expertise gained through implementation of TSCA.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,745,600 supported by 12.1 total workyears of which $681,200 was from the Salaries and Expenses appropriation and $1,064,400 was from the Abatement, Control and Compliance appropriation.

In 1985, Toxics Integration activities focused on cross-media toxic pollution problems and on providing mechanisms to promote inter-media coordination. Cross-media chemical strategies were initiated or continued on polychlorinated biphenyls disposal issues, hexachlorobenzene and methylene chloride. New areas of potential cross-media support using TSCA authorities were identified for various EPA offices, including the use of Section 8(d) by the Office of Solid Waste and Section 4 by the Office of Air and Radiation.

Updates to the Intermedia Priority Pollutant documents were published. The EPA Chemical Activity Status Report and the TSCA Test Submission System were maintained and are available to the public. Conversion of the Chemical Substances Information Network (CSIN) to a microcomputer environment was completed and the CSIN microsoftware was made available through the National Technical Information Service in September 1985.

CHEMICAL TESTING

1987 Program Request

The Agency requests a total of $7,920,800 supported by 86.0 total workyears for this program, of which $3,912,500 will be for the Salaries and Expenses appropriation and $4,008,300 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $188,000 and a decrease of $688,900 respectively, and no change in total workyears. The increase in Salaries and Expenses results from higher anticipated operating costs. The decrease in Abatement, Control and Compliance is a result of changes in the test rule development process.

In 1987, the Agency will emphasize streamlined, enforceable actions designed to get testing underway as quickly as possible. Test data development activities will include: publication of initial testing decisions on eight chemicals from the 17th and 18th ITC lists and one ITC recommended chemical from the 14th list. Another 19 testing actions will be issued -- 15 will be final rules requiring testing to begin. We will continue toward final test rulemaking action on two non-ITC chemicals--diethylene glycol butyl ether and dioxins and dibenzofurans.

We will begin test rule development on the category of glycol ethers. Testing will fill data gaps identified by the Existing Chemical Review program and necessary for risk assessment and regulatory purposes. We will also continue preliminary work on an exposure-based test rule that will require health effects testing of certain high-exposure chemicals identified through the Agency's human monitoring program.

By the end of 1987, test rules will have been promulgated on 17 ITC chemicals. As final test rules are published, the Agency will continue to process applications for exemptions from testing. We will also continue to conduct data and laboratory audit activities to ensure that TSCA test data are reliable and scientifically sound. Support to other EPA programs will be provided as priority testing requirements are identified. In addition, TSCA Section 4 rulemaking records and industry submissions will be shared with other EPA offices. The guidelines program will continue at the level established in 1986. Data development activities will be initiated for chemicals on the 19th and 20th ITC lists.

1986 Program

In 1986, the Agency is allocating a total of $8,421,700 supported by 86.0 total workyears for this program, of which $3,724,500 is from the Salaries and Expenses appropriation and $4,697,200 is from the Abatement, Control and Compliance appropriation.

The Agency is considering the use of consent agreements as an enforceable alternative to test rules. Such agreements would be used where a consensus on testing requirements exists among EPA, manufacturers and/or processors, and interested members of the public. In such circumstances, consent agreements can expedite the initiation of testing while providing safeguards equivalent to those that would apply under test rules. The consent agreements would assure that sanctions could be imposed under TSCA's penalty provisions if agreedupon testing were not performed and will trigger other key TSCA provisions, similar to a test rule.

A high level of testing activity is planned. During the year, data development activities are being initiated for chemicals included on the 17th and 18th ITC lists. Responses to the seven chemicals on the 15th ITC list were published between August and November 1985 with test rules being proposed for five of those chemicals; initial testing decisions will be issued in May 1986 on the 16th ITC list which includes five chemicals. Another 15 testing actions will be issued -- two will be final rules requiring testing to begin; the others (from earlier ITC lists) will require another stage of rulemaking. Non-ITC chemical data development activities are continuing on diethylene glycol butyl ether, and dioxins and dibenzofurans. For the first time, the authority of Section 4 is being used to propose priority testing for another EPA program in support of land disposal restrictions under the 1984 Amendments to the Resource Conservation and Recovery Act. OTS is continuing its participation in data audit activities to ensure that test data are reliable and scientifically sound.

Test guideline activity continues at the 1985 level with publication of several additional chemical fate and environmental effects test methods expected. Four new guidelines, under development since 1984, are being published on site-specific and generic microcosm methodologies.

1985 Accomplishments

In 1985, the Agency obligated a total of $12,772,900 supported by 109.0 total workyears, of which $5,095,000 was from the Salaries and Expenses appropriation and $7,677,900 was from the Abatement, Control and Compliance appropriation.

During 1985, testing actions were taken on a total of 23 chemicals. Initial decisions included four chemicals on the 13th ITC list and five chemicals on the 14th ITC list; testing will be required on four of the nine chemicals. Post initial and final decisions included eleven actions: three proposed and eight final. The Agency also acted on carbofuran intermediates, recommended by the ITC in its 11th list but not designated for response within one year; a decision not to require testing was published. One non-ITC testing action was published: an advance notice of proposed rulemaking on diethylene glycol butyl ether, a chemical identified by the Existing Chemical Review program.

During 1985, EPA amended its two-phase rulemaking procedures to add a streamlined single-phase rulemaking process to expedite the development of test rules. This approach has several advantages--it shortens the rulemaking period to 24 months; expedites initiation of the required testing, eliminates the requirement for industry to submit test protocols for approval; yet preserves the flexibility of the two-phase process by allowing industry to submit alternative test methodologies during the comment period.

Four new chemical fate guidelines were published in 1985. To date, EPA has published a total of 94 test guidelines covering 110 test methods. The annual review of published guidelines resulted in one guideline being updated.

EXISTING CHEMICAL REVIEW

1987 Program Request

The Agency requests a total of $17,961,200 supported by 178.6 total workyears for this program, of which $7,856,400 will be for the Salaries and Expenses appropriation and $10,104,800 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $234,200 and a decrease of $192,800 respectively, and a decrease of two total workyears. The increase in Salaries and Expenses is a result of higher anticipated operating costs. The decrease in Abatement, Control and Compliance will be possible through increased use of category evaluations. The reduction in total workyears results from a decrease of 12 total workyears transferred to the Asbestos-in-Schools Program Administration program and an increase of ten total workyears for air toxics, groundwater, and category evaluation activities.

TSCA will be used to support Agency efforts to address groundwater contamination and air toxics. We will determine the feasibility of using TSCA's information collection provisions to obtain data on groundwater contamination by volatile organic chemicals, fertilizers, and waste discharges from septic tanks. The Office of Toxic Substances' modeling expertise will be used to predict areas which are vulnerable to groundwater contamination and to establish data collection priorities for areas most likely to be contaminated. OTS will continue to provide support and expertise to the air toxics strategy by developing site-specific criteria, and revising the acute hazards list and chemical profiles.

In 1987, we will continue to emphasize the chemical category approach to existing chemical problems. Regulatory issues of the past few years highlight the importance and need for the assessment and regulation of chemicals by categories. The issue of new chemical bias (unbalanced scrutiny of new chemicals compared to existing ones) and the issue of how to address the risks posed by use substitutes for regulated existing chemicals stem from regulation on a chemical-by-chemical basis. Category evaluations allow the Agency to examine both the existing and new members of a category simultaneously rather than sequentially and to develop regulatory responses which address both. We will continue our efforts to characterize risks associated with aromatic amines, epoxy resins, and respirable fibers categories; action on two other categories (i.e., a Section 4 test rule on glycol ethers and a Section 5 significant new use rule on acrylates) is planned in the Chemical Testing and New Chemical Review programs.

The existing chemicals program review process will continue to deal with an estimated 85 chemicals in some stage of problem characterization, risk evaluation, and risk management; most of these chemicals will have entered review prior to 1987. About 16 risk management actions are planned in 1987. These include Section 6 control actions, Section 9 referrals, Section 5 significant new use rules and non-regulatory chemical advisories.

TSCA Information gathering authorities will be used to support assessment activities on TSCA chemicals, as well as chemicals of concern to other EPA offices. The Section 8(a) comprehensive assessment information rule (CAIR) will be published in final form. This model rule will provide a comprehensive, standardized reporting capability for all Agency offices. We will continue to identify and coordinate cross-media chemical issues and to utilize TSCA to support other EPA programs and Federal agencies. We will exchange TSCA information with other EPA offices, States, Regions, other Federal agencies, and international organizations. Data base development will include systems for the updated TSCA inventory and for CAIR.

1986 Program

In 1986, the Agency is allocating a total of $17,919,800 supported by 180.6 total workyears for this program, of which $7,622,200 is from the Salaries and Expenses appropriation and $10,297,600 is from the Abatement, Control and Compliance appropriation.

The emphasis on dealing with existing chemical problems and the use of category evaluations continues in 1986. Preliminary strategies have been developed on acrylates, aromatic amines, glycol ethers, epoxy resins, and respirable fibers. In 1986, we are implementing some elements of the control strategies for two categories by beginning to draft regulations; strategies for three categories are undergoing further evaluation. The existing chemical program review process continues to look at individual chemicals as they come to our attention through TSCA's screening provisions, maintaining approximately 80-85 chemicals in the process. Risk management activities will focus on regulatory actions under Section 6 or Section 9 on glycol ethers, metalworking fluids, formaldehyde, methylene chloride, and on the public and commercial uses of asbestos. Section 5 significant new use rules and chemical advisories are planned on several other chemicals.

Broad use of TSCA's information gathering authorities will continue. The Agency plans to finalize the Section 8(d) rule supporting information needs of the Office of Solid Waste. The comprehensive assessment information rule (CAIR) is being proposed under Section 8(a) of TSCA allowing the Agency to move closer to its goal of a model reporting rule. Standardized reporting under this rule will not only minimize new rule development but will reduce duplicative efforts and industry reporting burden. The TSCA inventory update rule is being finalized and will require manufacturers/importers of chemical substances to report current production volume and plant site data on a critical portion of the chemicals included on the TSCA chemical inventory. One of the major attributes of this rule is that it requires both initial and recurring reporting -- an updating mechanism not included in the original inventory reporting rule. Broad-based monitoring will identify existing chemicals with widespread human exposure.

Salaries and Expenses and total workyear costs for Asbestos-in-Schools Program Administration, described elsewhere under Toxic Substances Financial Assistance, are budgeted in this program.

1985 Accomplishments

In 1985, the Agency obligated a total of $16,716,300 supported by 171.6 total workyears for this program, of which $7,116,500 was from the Salaries and Expenses appropriation and $9,599,800 was from the Abatement, Control and Compliance appropriation.

During the year, the Agency undertook a number of new initiatives designed to improve and refine its information gathering and risk evaluation capabilities, and to address several significant hazards to human health and the environment. TSCA data and expertise played a key role in the Agency's air toxics strategy by preparing criteria, an illustrative list of acutely toxic substances, chemical-specific profiles and guidance to local communities for evaluating and responding to accidental releases. A rule was proposed under TSCA Section 8(d) to acquire health and safety studies from industry for use by the Office of Solid Waste; this marks the first time a TSCA rule was written specifically to collect information for another program. The Agency proposed a Section 8(a) rule that would require manufacturers/importers of chemical substances to report current production volume and plant site data on a critical portion of the more than 63,000 chemicals included on the TSCA Chemical Inventory. The proposed rule represents the first update of the inventory's production data since 1977.

Other major risk evaluation activities in 1985 focused on a Section 4(f) priority review of methylene chloride and a regulatory investigation of formaldehyde. Risk assessment documents were prepared on six potentially hazardous chemicals. During 1985, 83 chemicals were subjected to the existing chemical program review process. Of that number, 21 were dropped, seven were referred for information gathering, 11 were referred for risk management, and 48 are undergoing further evaluation. Risk management activities in 1985 resulted in TSCA Section 6 actions or Section 9 referrals on polychlorinated biphenyls, asbestos abatement, methylenedianiline (4,4'-MDA) and 1,3-butadiene. We also proposed Section 5 significant new use rules to monitor the future use of 4,4'-methylenebis(2-chlorobenzenamine) (MBOCA) and hexachloronorbornadiene (HEX-BCH). The Agency issued chemical advisories on two chemicals, and continued work on glycol ethers and metalworking fluids.

Salaries and Expenses and total workyear costs for the Asbestos-in- Schools Program Administration, described elsewhere under the Toxic Substances Financial Asssistance, are budgeted in this program.

NEW CHEMICAL REVIEW

1987 Program

The Agency requests a total of $16,280,400 supported by 209.6 total workyears for this program, of which $9,043,300 will be for the Salaries and Expenses appropriation and $7,237,100 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $381,600 and a decrease of $72,200 respectively, and no change in total workyears. The increase in Salaries and Expenses is a result of anticipated higher operating costs. The decrease in Abatement, Control and Compliance will be possible through streamlining of the PMN process.

EPA will continue to subject all new chemicals to a thorough review (premanufacture notification, or PMN) to ensure that any unreasonable health and environmental risks are adequately controlled. In 1987, EPA will review approximately 1,800 new chemical notices of which 300 are eligible for an abbreviated review as defined in the polymer, low volume, and test market exemptions. About 120 of the PMN chemicals will require some form of control (testing, exposure controls, withdrawal of PMN's). Test data will be arriving as a result of Section 5(e) actions. There will be increased attention to coordination of reviews and actions with other programs to ensure that decisions are consistent across the Agency and that future environmental problems (e.g., air, water, disposal) are effectively prevented. Close coordination with the Existing Chemical Review Program will also be an integral part of all new chemical decisions.

In 1987, we will continue emphasis on ensuring that risks do not develop as new chemicals enter the marketplace. We will publish proposed or final significant new use rules (SNURs) or Section 8(a) reporting rules for 25 new chemicals. We will focus on chemicals that are the subject of Section 5(e) orders, and other new chemicals that present toxicity characteristics which warrant follow-up. The program will continue to stress more efficient regulatory approaches including category follow-up rules. Two category SNURs will be prepared during 1987. The practice of issuing advisory circulars that provide guidance to industry on new chemical requirements and policies will continue. We will also continue to implement the Agency's policy on biotechnical substances and work closely with other parties to provide for the coordinated review of biotechnical substances. The Structure Activity Relationship (SAR) study will be continued. Testing is expected to take three years; therefore, analysis of the results of this study will not be ready until June 1988.

The Agency plans to initiate studies on regulatory, operational, and administrative isssues related to instituting fees for this program in 1987. The fees will not affect the Budget Authority described for this program in 1987.

1986 Program

In 1986, the Agency is allocating a total of $15,971,000 supported by 209.6 total workyears for this program, of which $8,661,700 is from the Salaries and Expenses appropriation and $7,309,300 is from the Abatement, Control and Compliance appropriation.

The workload of this program increased dramatically in 1985 but is expected to stay relatively level in 1986. Productivity improvements in the program have allowed us to keep up with workload demand. In 1986, we anticipate receiving 1,800 new chemical notices of which approximately 120 will require some form of Agency control, either voluntary or formal; 300 actions will receive an abbreviated review under the polymer and low volume exemption rules promulgated in 1985; and we expect to review and act on 60 test market exemption requests. In 1986, EPA will issue a final policy statement concerning the applicability of TSCA to biotechnology products.

The follow-up of new chemicals remains an important part of the program. We will issue chemical-specific significant new use rules (SNURs) for 25 new chemical substances subject to Section 5(e) orders as well as certain other chemicals that may present toxicity characteristics that warrant follow-up. We will propose the first generic follow-up rule to cover a category of chemicals (acrylates). The acrylate category rule and follow the same procedures for case-by-case Section 5(e) orders and the established process for follow-up SNURs. These broader rules will improve the efficiency of the follow-up program and allow industry to begin follow-up procedures more quickly. In 1986, the first new chemical advisory circulars will be published to provide guidance to industry on the new chemical program requirements or policies such as data requirements for categories of chemicals.

A study is being conducted to determine if the Structure Activity Relationship (SAR) technique is an accurate predictor of a chemical's potential toxicity. SAR is the process by which the Agency uses chemical fate and biological effects data on structurally related chemicals to estimate hazards of PMN chemicals under review. EPA currently receives toxicity data on less than 50 percent of all PMNs submitted, and these data most commonly consist of acute toxicity studies. Since we do not have chronic toxicity data, EPA relies on SAR techniques to assess hazards. The SAR study will test the chronic toxicity of 100 substances and compare the results with the SAR judgments that were made when the substances underwent PMN review.

1985 Accomplishments

In 1985, the Agency obligated a total of $14,169,400 supported by 207.0 total workyears for this program, of which $8,634,700 was from the Salaries and Expenses appropriation and $5,534,700 was from the Abatement, Control and Compliance appropriation.

This program experienced a dramatic workload increase in 1985 (nearly 1,800 notices vs. the 1,200 expected). Ongoing efforts to improve our review process and other productivity increases enabled us to meet this demand. Of the 1,787 notices received in 1985, 66 were test market exemption applications, of which 60 were granted and 6 denied; another 243 notices were submitted under the polymer and low volume exemption procedures established early this year.

In 1985, the Agency made a concerted effort to increase the quantity and quality of toxicity data on new chemicals suspected of presenting unreasonable risks. The Agency asks for testing before production begins if the testing can be done quickly and without unreasonable expense. EPA also asks for preproduction testing if the potential risk cannot be adequately controlled pending availability of the data. However, if the potential risk can be controlled, EPA issues "delayed trigger" testing orders under section 5(e) which require submission of test data only when production of the chemical reaches a predetermined volume.

EPA also implemented two final rules to exempt certain chemicals from full PMN notice and review requirements; one rule applied to certain polymers and to esters manufactured solely from a list of approved reactants; the second rule exempted chemicals that are produced in small amounts (i.e., less than 1,000 kg/yr). Under both exemption rules, eligible polymers and low volume chemicals are now subject to a shortened 21-day review period and to abbreviated notice requirements. We continued to monitor new chemicals that may be of concern if their uses change, or if production volumes significantly increase from those estimated during their initial review. During the year, EPA proposed 10 SNURs covering 19 new chemicals and promulgated seven SNURs covering 12 chemicals to regulate the manufacture, import, or processing of a chemical subject to a SNUR.

Work on biotechnology advanced during 1985. EPA published a proposed policy statement clarifying the applicability of TSCA and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to new microorganisms produced through biotechnology and used commercially.

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TOXIC SUBSTANCES

Toxic Substances Enforcement

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Toxic Substances Enforcement								
Salaries & Expenses		$5,748.3	$6,707.6	$6,651.4	-$285.9	$6,365.5	$6,672.4	$306.9
Abatement Control and Compliance		$1,253.9	$2,325.5	$2,325.5	-$100.0	$2,225.5	$1,825.5	-$400.0
	TOTAL	$7,002.2	$9,033.1	$8,976.9	-$385.9	$8,591.0	$8,497.9	-$93.1
Toxic Substances Enforcement Grants								
Abatement Control and Compliance		$1,500.0	$2,300.0	$2,300.0	-$98.9	$2,201.1	$2,200.0	-$1.1
	TOTAL	$1,500.0	$2,300.0	$2,300.0	-$98.9	$2,201.1	$2,200.0	-$1.1
TOTAL:								
Salaries & Expenses		$5,748.3	$6,707.6	$6,651.4	-$285.9	$6,365.5	$6,672.4	$306.9
Abatement Control and Compliance		$2,753.9	$4,625.5	$4,625.5	-$198.9	$4,426.6	$4,025.5	-$401.1
Toxic Substances Enforcement	TOTAL	$8,502.2	$11,333.1	$11,276.9	-$484.8	$10,792.1	$10,697.9	-$94.2
PERMANENT WORKYEARS								
Toxic Substances Enforcement		142.8	158.0	162.6		162.6	162.6	
TOTAL PERMANENT WORKYEARS		142.8	158.0	162.6		162.6	162.6	

TOXIC SUBSTANCES

Toxic Substances Enforcement

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Toxic Substances Enforcement	158.4	168.7	175.6		175.6	175.6	
TOTAL WORKYEARS	158.4	168.7	175.6		175.6	175.6	

TOXIC SUBSTANCES

Toxic Substances Enforcement

Budget Request

The Agency requests a total of $10,697,900 supported by 175.6 total workyears for 1987, a decrease of $94,200 and no change in total workyears from 1986. Included in this total is $6,672,400 for the Salaries and Expenses appropriation, and $4,025,500 for the Abatement, Control and Compliance appropriation, an increase of $306,900 and a decrease of $401,100 respectively.

Program Description

This subactivity supports all compliance monitoring and compliance assistance activities under the Toxic Substances Control Act (TSCA), including support for regulation development, Regional compliance monitoring and case development, Regional polychlorinated biphenyls (PCB) disposal permitting efforts, and management and oversight of State grant programs.

Toxic Substances Enforcement -- The Toxic Substances Enforcement program ensures compliance with TSCA and related rules and regulations. Headquarters and Regional offices play distinct but complementary roles in the program's operation. Headquarters provides enforcement support to the TSCA regulatory development process; designs, implements, and oversees compliance monitoring activities by developing guidance, strategies and procedures; and provides technical compliance assistance and technical support to case development and prosecution activities. Headquarters also manages the laboratory data integrity program. This program involves inspections of laboratories that perform toxic substances testing and indepth audits of test studies submitted to the Agency under TSCA testing programs.

Regional offices respond to special risk situations; inspect facilities that manufacture, process, distribute or use new or specifically regulated chemicals; and monitor laboratories performing tests pursuant to TSCA testing rules or voluntary testing agreements. Regional offices also assist the regulated community in complying with all applicable TSCA regulations and seek voluntary remedial action in lieu of enforcement prosecution where appropriate. In cases where voluntary compliance is not achieved, Regional personnel prepare and issue notices of violation and administrative orders. The enforcement program assists and supports the Office of Enforcement and Compliance Monitoring (OECM) in the development of civil and criminal referrals.

Toxic Substances Enforcement Grants -- This program provides financial assistance to State agencies to develop and operate toxic substances compliance monitoring programs, in cooperation with the Environmental Protection Agency, especially in the area of control of PCB and asbestos. This program permits wider coverage of the regulated community without requiring additional Federal personnel.

TOXIC SUBSTANCES ENFORCEMENT

1987 Program Request

The Agency requests a total of $8,497,900 supported by 175.6 total workyears for this program, of which $6,672,400 will be for the Salaries and Expenses appropriation and $1,825,500 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $306,900 for the Salaries and Expenses appropriation and a decrease of $400,000 for the Abatement, Control and Compliance appropriation and no change in total workyears. The increase in Salaries and Expenses represents increased staff support and the decrease in Abatement, Control and Compliance is possible because of lower requirements for asbestos-in-schools compliance inspections.

In 1987, the Toxic Substances Enforcement program will continue to emphasize case development and providing technical assistance to improve levels of compliance. The case development workload will remain high as a result of State programs started in 1985 and becoming more active in 1986 and 1987. Compliance assistance involves alerting the regulated community of EPA regulatory actions and providing advice and direct assistance to industry in its efforts to come into compliance with TSCA rules.

In 1987, the Regional offices will maintain inspection levels of facilities subject to regulations for PCB marking and disposal and the PCB ban. Inspection resources will be directed to those industries that have exhibited high violation rates of the PCB regulations.

The Regions will conduct follow-up or supplemental inspections in support of the asbestos-in-schools rule, although most asbestos-in-schools compliance monitoring inspections will be conducted through a contractor. This funding will support reviews of records maintained by local education agencies to ensure inspections are conducted to detect friable asbestos. The Regions will also continue to inspect for compliance with the asbestos worker protection rule in States where the Occupational Safety and Health Administration does not inspect. Finally, technical assistance and training in asbestos abatement efforts will be provided for State and local government personnel and for owners and managers of public and commercial buildings.

The Regional offices will conduct 1) good laboratory practice (GLP) and test rule inspections, 2) inspections to determine compliance with new chemical regulations, 3) inspections under the TSCA reporting requirements, 4) import inspections, and 5) export inspections. The Regional offices will provide management and oversight of compliance monitoring activities of those States participating in the TSCA State cooperative agreement program. The Regional offices will be responsible for the review and approval of PCB landfills and unique design stationary PCB incinerators, PCB disposal site monitoring and liaison activities (e.g., public hearings) associated with PCB disposal. The Office of Toxic Substances will issue permits to all chemical and biological destruction systems, all mobile incinerators, and all stationary PCB incinerators that are not of a unique design.

Headquarters staff will participate in TSCA rulemaking activities and will develop compliance strategies and enforcement response policies for each new regulation. Headquarters will provide support for Regional compliance monitoring, voluntary compliance assistance, and case development activities under Sections 4, 5, 6, 8, 12 and 13. Headquarters will continue to manage the overall program through appropriate guidance and Regional reviews, including on-sight program evaluations. Headquarters will also be responsible for managing the extramural funding of compliance monitoring inspections in support of the asbestos-in-schools rule. The Toxic Substances Enforcement program will also prepare and issue notices of violation and administrative orders and will provide technical assistance and support to OECM in the prosecution of civil and criminal cases as warranted.

1986 Program

In 1986, the Agency is allocating a total of $8,591,000 supported by 175.6 total workyears, of which $6,365,500 is from the Salaries and Expenses appropriation and $2,225,500 is from the Abatement, Control and Compliance appropriation.

The Regional program inspects for compliance and provides direct assistance to firms seeking to comply voluntarily with TSCA requirements. Where violations are detected, EPA will encourage firms to take specific remedial actions to achieve compliance. If compliance is not achieved, Regional offices prepare and issue notices of violation and administrative orders, and will develop and prosecute cases, as warranted. The Agency will give priority to situations involving substantial threats to human health and the environment.

The Regional offices conduct inspections to determine compliance with Section 4 testing; Section 5 new chemical regulations; Section 6 chemical control rules including PCB marking and disposal, the PCB ban, asbestos-in-schools rule, and other enforceable rules; Section 8 reporting rules; Section 12 export requirements; and Section 13 import requirements. In the asbestos area, technical assistance and training in asbestos abatement efforts are being provided for State and local government personnel and for owners and managers of public and commercial buildings. Regional offices provide oversight and management for the State grant program. The Regional offices also are responsible for PCB site disposal monitoring, liaison functions associated with PCB disposal, and the review and approval of PCB landfills and unique-design stationary PCB incinerators.

Headquarters manages and execute national programs to monitor compliance with test rules and voluntary testing agreements under Section 4, new chemical regulations under Section 5, Section 6 chemical control rules, Section 8 reporting regulations, Section 12 export notice requirements, and Section 13 import requirements. Headquarters is responsible for managing the extramural funding of compliance monitoring inspections under the asbestos-in-schools program. Headquarters also participates in regulation development directed by the Office of Toxic Substances.

1985 Accomplishments

In 1985, the Agency obligated $7,002,200 supported by 158.4 total workyears, of which $5,748,300 was from the Salaries and Expenses appropriation and $1,253,900 was from the Abatement, Control and Compliance appropriation. Extramural funds provided compliance inspection support, chemical analysis of samples, and data processing support.

Regional staff responded to special risk incidents, inspected PCB establishments, conducted compliance monitoring activities to support Section 5 premanufacture notification review and Section 8(e) substantial risk notification, and developed and prosecuted enforcement cases upon detection of serious violations, including those originating from State-conducted inspections. The Agency issued administrative orders in 733 cases, and issued 1,136 notices of warning. The Agency also referred two criminal and six civil cases to the Department of Justice.

Headquarters prepared compliance monitoring strategies for the revised Section 6 PCB rule, amended Section 6 PCB Transformer Fires rule, TSCA Environmental Monitoring update, FIFRA and TSCA Good Laboratory Practices (GLPs) rule, and the Section 6 Asbestos Worker Protection rule. The Headquarters compliance monitoring staff developed enforcement response policies for TSCA Good Laboratory Practices requirements and the Section 6 Asbestos Worker Protection rule. Headquarters also amended enforcement response policies for Section 5 new chemicals requirements, Section 6 Asbestos-in-Schools rule, and Section 8(a) recordkeeping and reporting requirements.

TOXIC SUBSTANCES ENFORCEMENT GRANTS

1987 Program Request

The Agency requests a total of $2,200,000 for this program, all for the Abatement, Control and Compliance appropriation. This represents a decrease of $1,100. The decrease reflects lower expected needs in the States.

This grant will be included in a legislative proposal for block grants designed to give States more flexibility and autonomy in administering environmental programs. In 1987, we expect States to continue the following activities.

EPA will support toxic substances compliance monitoring programs in 17 participating States. The State programs will emphasize chemical control rules, particularly compliance monitoring of PCBs and asbestos.

1986 Program

In 1986, the Agency is allocating a total of $2,201,100 to this program, all from the Abatement, Control and Compliance appropriation. These funds support State-conducted toxic substances compliance monitoring programs in 17 States. These State programs concentrate upon chemical control rules under Section 6, in particular PCB and asbestos compliance monitoring.

1985 Accomplishments

The Agency obligated a total of $1,500,000 for this program, all from the Abatement, Control and Compliance appropriation. These funds supported State cooperative enforcement agreement programs in 15 States. These States conducted 463 PCB inspections and 133 asbestos-in-schools inspections.

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ENERGY

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$6,470.2	$5,454.1	$5,129.8	-$220.5	$4,909.3	$5,486.4	$577.1
Research & Development	$50,342.3	$61,863.2	$56,577.9	-$2,433.8	$54,144.1	$54,103.0	-$41.1
TOTAL, Energy	$56,812.5	$67,317.3	$61.707.7	-$2,654.3	$59,053.4	$59,589.4	$536.0
PERMANENT WORKYEARS	94.1	89.2	88.4		88.4	77.2	-11.2
TOTAL WORKYEARS	105.7	97.7	97.0		97.0	85.8	-11.2
OUTLAYS	$41,692.6	$58,659.6	$62,301.4	-$857.3	$61,444.1	$61,349.2	-$94.9
AUTHORIZATION LEVELS	Authorization for Energy is under the Research and Development Act, which expired September 30, 1981, and reauthorization is pending.						

ENERGY

OVERVIEW AND STRATEGY

The Multi-media Energy research and development program provides the scientific information necessary to guide the development and utilization of energy resources in an environmentally acceptable manner. This program includes three major program areas: 1) acid deposition; 2) Limestone Injection Multistage Burner (LIMB) control technology; and 3) alternate energy (synthetic fuels) development.

Acid Deposition

The acid deposition research program represents the Agency's part of the National Acid Precipitation Assessment Program which is mandated by the Energy Security Act of 1980 (Title VII of P.L. 96-294). Its purpose is to increase the understanding of the causes and effects of acid deposition so that reliable information can be made available to policy-makers in support of their efforts to determine what measures should be taken to resolve the acid deposition problem.

The 1987 program will continue to expand the basic research that will provide better information on the physical and chemical mechanisms, and the deposition processes, that govern the acid deposition phenomenon. Major emphasis will be placed on the development and evaluation of atmospheric models. This research will enable policy-makers to predict changes in deposition levels that result from emission reductions in nearby or distant sources.

The 1987 program will also expand the scope of research on materials damage. Recent scientific information indicates that the effects of acid deposition on materials may be significant. In 1987, EPA will conduct field and laboratory research to quantify more precisely the potential economic impact of damage to materials due to acid deposition. For example, brick, mortar, concrete, roofing materials and building sealants will be added to the EPA field testing program.

A third area of major emphasis will be enhanced research on aquatic effects. In 1987, EPA will enhance research that seeks to quantify the effects of acidification on aquatic systems through the development of dose/response relationships. Major emphasis in 1987 will be placed on completing the National Surface Water Survey (NSWS). This effort has involved sampling the chemistry and biology of lakes and streams throughout the United States to assess the status of acidification of surface waters.

LIMB Control Technology

The LIMB control technology program is designed to develop and demonstrate effective and inexpensive emission control systems that will simultaneously remove sulfur oxides (SO_x) and nitrogen oxides (NO_x) from boiler flue gases of new and existing pulverized coal-fired boilers. This research and development program will continue to provide data on performance, reliability, and cost efficiency to accelerate the commercial availability of the technology in both wall-fired and tangentially-fired applications.

Synthetic Fuels

In 1987, EPA will eliminate the synthetic fuels research program. This program currently focuses on providing special studies on synfuel specific processes for EPA regulatory offices and States in the development of Environmental Impact Statements, permit applications and monitoring plans. These synfuels studies reflect research associated with projects sponsored by the U.S. Synthetic Fuels Corporation (SFC). Since the SFC will be eliminated in 1986, EPA's research role in this area will be completed.

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ENERGY

Multi-Media Energy

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Acid Rain - Multi-Media - Energy								
Salaries & Expenses		$3.508.9	$3,094.1	$3,107.1	-$133.6	$2,973.5	$4,000.0	$1,026.5
Research & Development		$34,450.5	$57,512.5	$47,837.6	-$2,058.0	$45,779.6	$51,133.0	$5,353.4
	TOTAL	$37,959.4	$60,606.6	$50,944.7	-$2,191.6	$48,753.1	$55,133.0	$6,379.9
Health Effects - Multi-Media - Energy								
Salaries & Expenses		$378.4						
Research & Development		$786.4						
	TOTAL	$1,164.8						
Environmental Engineering & Technology - Multi-Media - Energy								
Salaries & Expenses		$2,582.9	$2,360.0	$2,022.7	$-86.9	$1,935.8	$1,486.4	-$449.4
Research & Development		$14,705.4	$3,950.7	$8,540.3	-$367.2	$8,173.1	$2,970.0	-$5,203.1
	TOTAL	$17,288.3	$6,310.7	$10,563.0	-$454.1	$10,108.9	$4,456.4	-$5,652.5
Environmental Processes & Effects - Multi-Media - Energy								
Research & Development		$400.0	$400.0	$200.0	-$8.6	$191.4		-$191.4
	TOTAL	$400.0	$400.0	$200.0	-$8.6	$191.4		-$191.4
TOTAL:								
Salaries & Expenses		$6,470.2	$5,454.1	$5,129.8	-$220.5	$4,909.3	$5,486.4	$577.1
Research & Development		$50,342.3	$61,863.2	$56,577.9	-$2,433.8	$54,144.1	$54,103.0	-$41.1
Multi-Media Energy	TOTAL	$56,812.5	$67,317.3	$61,707.7	-$2,654.3	$59,053.4	$59,589.4	$536.0

ENERGY

Multi-Media Energy

(DOLLARS IN THOUSANDS)

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
PERMANENT WORKYEARS							
Acid Rain - Multi-Media - Energy	50.9	56.0	55.2		55.2	55.2	
Health Effects - Multi-Media - Energy	4.8						
Environmental Engineering & Technology - Multi-Media - Energy	38.4	33.2	33.2		33.2	22.0	-11.2
TOTAL PERMANENT WORKYEARS	94.1	89.2	88.4		88.4	77.2	-11.2
TOTAL WORKYEARS							
Acid Rain - Multi-Media - Energy	58.9	60.0	60.0		60.0	60.0	
Health Effects - Multi-Media - Energy	4.8						
Environmental Engineering & Technology - Multi-Media - Energy	42.0	37.7	37.0		37.0	25.8	-11.2
TOTAL WORKYEARS	105.7	97.7	97.0		97.0	85.8	-11.2

ENERGY

Multi-media Energy

Principal Outputs by Objective

1987 PLANNED OUTPUTS

Objective 1: Estimate Emissions from Man-made Sources

- A 1985 emissions inventory for use with the Regional Acid Deposition Model (Acid Rain)

Objective 2: Understand Atmospheric Processes

- Field studies to improve our confidence in the Regional Acid Deposition Model (Acid Rain)

Objective 3: Establish Deposition Monitoring Data Bases

- An expanded dry deposition network of approximately 40-50 sites (Acid Rain)

Objective 4: Understand and Quantify Aquatic Effects

- A report on results of the Western Lake Survey (Acid Rain)
- A report on "Direct/Delayed Response" of water bodies to acid deposition inputs (Acid Rain)

Objective 5: Understand and Quantify Terrestrial Effects

- A report on the association of acid deposition and its precursors with the decline in forest productivity in high altitude forests (Acid Rain)

Objective 10: Develop and Evaluate LIMB Control Technology

- A report on LIMB engineering studies as they relate to commercialization requirements for industry (Env. Technology)
- A report on pilot-scale tests to evaluate LIMB sorbent injection parameters for boiler applications (Env. Technology)

1986 PLANNED OUTPUTS

Objective 1: Estimate Emissions from Man-made Sources

- An improved 1985 man-made emissions inventory (Acid Rain)

Objective 2: Understand Atmospheric Processes

- A cloud chemistry network to cover the major high altitude forest systems in the eastern United States (Acid Rain)

Objective 3: Establish Deposition Monitoring Data Bases

- A dry deposition monitoring network (30 sites) based on the 1985 pilot network (Acid Rain)

Objective 4: Understand and Quantify Aquatic Effects

- o A full stream sampling study as part of the National Surface Water Survey (Acid Rain)
- o A report on the analysis of long-term monitoring data (Acid Rain)

Objective 5: Understand and Quantify Terrestrial Effects

- o A final report on reduced annual incremental growth in trees (Acid Rain)
- o A progress report on spruce/fir forest effects (Acid Rain)

Objective 8: Assess Research Results and Data to Provide Information for Policy Analysis

- o A report on the 1985 Assessment and deposition phenomenon (Acid Rain)

Objective 10: Develop and Evaluate LIMB Control Technology

- o A report documenting site specific design for the wall-fired field demonstration (Env. Technology)
- o A report on the effects of coal sulfur, trace ash species evaluation, and promoters for sulfur capture (Env. Technology)

1985 ACTUAL OUTPUTS

Objective 1: Estimate Emissions from Man-made Sources

- o A comprehensive 1980 emissions inventory (Acid Rain)
- o A report on Historical Emissions Trends, 1900-1980 (Acid Rain)

Objective 2: Understand Atmospheric Processes

- o The establishment of the eastern mountain top monitoring stations (Acid Rain)

Objective 3: Establish Deposition Monitoring Data Bases

- o A report on prototype dry deposition monitors (Acid Rain)
- o A siting plan for the dry deposition monitoring network (Acid Rain)

Objective 4: Understand and Quantify Aquatic Effects

- o Final reports on primary analyses of data from eastern lake component of the National Surface Water Survey (Acid Rain)
- o A multi-regional survey of watershed sensitivity (Acid Rain)

Objective 5: Understand and Quantify Terrestrial Effects

- o A joint research project with the U. S. Forest Service on the forest decline syndrome in northeastern and southeastern forests (Acid Rain)

Objective 8: Assess Research Results and Data to Provide Information for Policy Analysis

- o A Critical Assessment Document on the acid deposition phenomenon (Acid Rain)
- o A report on the inventory of National Acid Precipitation Assessment Program research projects (Acid Rain)

ENERGY

Multi-media Energy

Budget Request

The Agency requests a total of $59,589,400 supported by 85.8 total workyears for 1987, an increase of $536,000 and a decrease of 11.2 total workyears from 1986. Of the request, $5,486,400 will be for the Salaries and Expenses appropriation and $54,103,000 will be for the Research and Development appropriation, an increase of $577,100 and a decrease of $41,100, respectively.

Program Description

The multi-media energy research and development program was designed to provide the scientific and technical information necessary to support the Agency's permitting and standard-setting processes, and to allow for the development and utilization of energy sources in an environmentally acceptable manner. Research is conducted to better understand the phenomenon of acid deposition and provide information upon which mitigation decisions may be made; expand EPA's knowledge of the performance, reliability, and cost of the limestone injection multistage burner (LIMB) control technology; characterize and evaluate synthetic fuels discharges; and evaluate the impacts of energy development in cold climates. The following objectives support these activities:

Objective 1: Estimate Emissions from Man-made Sources. This research improves our understanding of the relationships among emissions resulting from man's activities.

Objective 2: Understand Atmospheric Processes. This research improves our capability to examine and predict the transport, chemical transformation, and deposition processes of air masses.

Objective 3: Establish Deposition Monitoring Data Bases. This work will quantify wet and dry deposition of acidic materials with sufficient resolution to establish trends; provide inputs to effects studies; and, provide information for source/receptor statistical analyses.

Objective 4: Understand and Quantify Aquatic Effects. This work will enable us to quantify the impacts of acidification on representative aquatic systems through the development of dose/response relationships and to apply these data to the development of appropriate mitigative measures.

Objective 5: Understand and Quantify Terrestrial Effects. This research establishes acid deposition dose-response relationships for various wild and cultivated plant species and estimates more accurately material transport through soils to aquatic systems.

Objective 6: Understand and Quantify the Effects on Materials and Cultural Resources. This research will determine how materials are damaged from acid deposition. This includes determining those materials and resources at risk and developing the information required to differentiate the effects of acid deposition from the effects of other natural and man-made sources.

Objective 7: Evaluate Control Technologies. This work will focus on developing "cost of control" tools. Activities will include analysis of both performance and costs of technologies; and the appraisal and development of selected hardware approaches.

Objective 8: Assess Research Results and Data to Provide Information for Policy Analysis. This work is designed to integrate the various aspects of the acid deposition research program and to provide information to decision-makers in a timely manner.

Objective 9: Characterize and Evaluate Synfuel Discharges and Control Technology. This program provides engineering support to EPA regulatory offices, regions, and States in the analysis of synthetic fuel-related environmental risks and in the evaluation of discharges and control technologies.

Objective 10: Develop and Evaluate LIMB Control Technology. This program continues to develop and evaluate an effective and inexpensive emission-control technology that will simultaneously remove sulfur oxides (SO_x) and nitrogen oxides (NO_x) from boiler flue gases of pulverized coal boilers.

Objective 11: Evaluate Impacts of Energy Development in Cold Climates. This research defines the impact of coal, oil and gas development, and atmospheric pollution on arctic and sub-arctic ecosystems.

ACID RAIN

1987 Program Request

The Agency requests a total of $55,133,000 supported by 60.0 total workyears for this program, of which $4,000,000 will be for the Salaries and Expenses appropriation and $51,133,000 will be for the Research and Development appropriation. This represents an increase of $1,026,500 and $5,353,400, respectively, and no change in total workyears. The increase in Salaries and Expenses will be used for monitoring equipment for the dry deposition monitoring network. The increase in Research and Development will be used to support research in the following areas: 1) the evaluation of acid deposition atmospheric models; 2) the expansion of research on materials effects; and 3) enhanced research on aquatic effects.

Estimate Emissions from Man-Made Sources. This research examines the relationships among man-made emissions to provide a more accurate estimate of major pollutants related to acid deposition. Research supported in 1987 includes: 1) developing emission inventories; and 2) developing models. These models will be responsive to policy options and used to analyze cost-effective strategies. The work will result in a 1985 emission data base and a final SO_2, NO_2, VOC, and alkaline material emissions inventory for use in the Eulerian model.

Understand Atmospheric Processes. The program continues to broaden our understanding of the atmospheric transport, physical and chemical transformation, and deposition processes of pollutants emitted into the atmosphere. The program continues to emphasize model development, the collection of field data, and model evaluation to better differentiate the contribution of local versus distant sources of acid deposition. This research will enable policy-makers to predict changes in deposition levels resulting from reductions in nearby or distant emissions. A major initiative in 1987 involves using field study data to improve our scientific confidence in the Regional Acid Deposition Model (RADM). RADM will be used in a number of important areas (e.g., to calibrate Lagrangian models, to develop control strategies, to perform source-receptor analysis, and to assess materials damage).

Establish Deposition Monitoring Data Bases. Work in this area will quantify wet and dry deposition of acid materials with sufficient resolution to establish cause and effect relationships. The program continues to support the 150 station National Trends Network (NTN) for wet deposition and to build a statistically valid baseline data set to compare various levels of deposition under various control strategies. The initial 30 dry deposition monitoring sites will continue to operate and additional sites will be established. In 1987 additional resources will be used to install monitoring equipment associated with the dry deposition network.

Understand and Quantify Aquatic Effects. Research here seeks to quantify the effects of acidification on representative aquatic systems through the development of dose/response relationships. In 1987 particular program emphasis will be in the following areas: 1) completing Phase II of the NSWS which will sample 200 to 300 lakes in sensitive regions of the U.S. to determine temporal and biologic variability; conducting a synoptic survey of streams in sensitive regions of the U.S.; selecting long-term monitoring sites; 2) formulating predictive regional aquatic chemistry models which incorporate episodic and non-episodic events; 3) developing biological response models for fish populations and other aquatic biota; and 4) continuing research to predict short-, mid-, and long-term responses of surface waters to acidification.

Understand and Quantify Terrestrial Effects. This research seeks to establish acid deposition dose-response relationships for various wild and cultivated plant species and to define more accurately material transport through soils to aquatic systems. In 1987 major activities include: 1) watersheds research to determine chemical input/output processes; 2) site characterization for four forest types under study; 3) correlational studies of pollutants and forest conditions; 4) the initiation of controlled pollutant exposure studies on seedlings and saplings; and 5) surveys of the extent and magnitude of observed forest productivity declines.

Understand and Quantify the Effects on Materials and Cultural Resources. This research will focus on how materials are damaged from acid deposition. Scientific information will be produced for a variety of materials (e.g., metallic surfaces, marble, and concrete). In 1987 damage function research (i.e., defining the unit of deteriorization of material for a given level of exposure) will be increased for painted wood, mortar, concrete, roofing materials, and building sealants.

Evaluate Control Technologies. This research will develop "cost of control" analysis tools that will become part of the overall acid deposition assessment framework. The research will continue to focus primarily on assessing the engineering applicability and costs of control technologies for a number of pollutants.

Assess Research Results and Data to Provide Information for Policy Analysis. This program is designed to integrate the various aspects of the acid deposition research activities and to provide information to decision-makers to formulate appropriate decisions for dealing with acid deposition issues on a timely and cost-effective basis. The primary research activities will be to validate assessment techniques and data bases which will be used in acid deposition assessments.

1986 Program

In 1986, the Agency is allocating a total of $48,753,100 supported by 60.0 total workyears for this program, of which $2,973,500 is from the Salaries and Expenses appropriation and $45,779,600 is from the Research and Development appropriation.

The major differences between the 1986 program and the 1985 program include the following: accelerating the development of a high resolution emission inventory for 1985; establishing a forest exposure monitoring network; expanding the dry deposition monitoring network to approximately 30 stations; improving the Regional Acid Deposition Model (RADM) through the evaluation of several of its component modules; expanding the National Surface Water Survey (NSWS) to include a full stream sampling study; accelerating the collaborative research program with the U.S. Forest Service on the effects of acid deposition and other air pollutants on spruce/fir forests in the East, and Southern commercial forests; initiating research on Eastern mixed hardwoods and Western conifers.

1985 Accomplishments

In 1985, the Agency obligated a total of $37,959,400 supported by 58.9 total workyears for this program, of which $3,508,900 was from the Salaries and Expenses appropriation and $34,450,500 was from the Research and Development appropriation.

During 1985 the acid deposition research program developed a comprehensive 1980 emissions inventory as well as a report on historical emissions trends from 1900 to 1980. The Eastern mountain-top monitoring stations were placed in operation and the program developed a siting plan for the dry deposition monitoring network. A series of reports were completed on data from the Eastern lake component of the NSWS. Additionally, a multi-regional survey of watershed sensitiviy was conducted. A joint research project with the U.S. Forest Service was initiated to examine the forest decline syndrome in Northeastern and Southeastern forests. In the assessment area, a Critical Assessment Document on the acid deposition phenomenon was completed.

HEALTH EFFECTS

1987 Program Request

The Agency requests no resources for this program in 1987.

1986 Program

This program was completed in 1985 and has no resources associated with it in 1986.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,164,800 supported by 4.8 total workyears for this program, of which $378,400 was from the Salaries and Expenses appropriation and $786,400 was from the Research and Development appropriation.

During 1985, the energy health effects program was completed with the development of several reports summarizing the results of EPA research conducted through 1984 on health risks associated with synthetic fuels production.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1987 Program Request

The Agency requests a total of $4,456,400 supported by 25.8 total workyears for this program, of which $1,486,400 will be for the Salaries and Expenses appropriation and $2,970,000 will be for the Research and Development appropriation. This represents a decrease of $449,400 and $5,203,100, respectively, and a decrease of 11.2 total workyears. The decrease in total workyears and the Salaries and Expenses appropriation reflects the completion of the Synfuels engineering support program. The decrease in the Research and Development appropriation involves two program areas. First, in 1987, EPA will eliminate the synfuels research program. This program currently focuses on providing special studies on synfuel specific processes sponsored by the U.S. Synthetic Fuels Corporation (SFC). Since the SFC will be eliminated in 1986, EPA's research role in this area will be completed. Second, the decrease in the Research and Development appropriation reflects the continued phase down of the LIMB program associated with EPA's implementation of a full-scale commercial demonstration of this technology.

Develop and Evaluate LIMB Control Technology. Research will continue in three major engineering areas: 1) laboratory and pilot scale development; 2) prototype testing; and 3) commercialization. The pilot scale development effort will continue to emphasize evaluation of LIMB particulate recycle and/or utilization systems. The prototype testing portion will evaluate high activity sorbent injection and economic analyses of the LIMB process. In the commercialization phase, engineering and economic analyses will be performed to determine the applicability of the LIMB process design as a function of boiler design, coal sulfur, and sorbents.

1986 Program

In 1986, the Agency is allocating $10,108,900 supported by 37.0 total workyears for this program, of which $1,935,800 is from the Salaries and Expenses appropriation and $8,173,100 is from the Research and Development appropriation.

During 1986, the environmental engineering and technology program is completing its consulting responsibilities as specified under the Energy Security Act, to assist the U.S. Synthetic Fuels Corporation and its project sponsors in evaluation of monitoring data. With the policy decision to abolish the Corporation, EPA anticipates no further requests for assistance under its Synfuels engineering support program.

In 1986, the LIMB program is continuing laboratory and pilot-scale research, prototype testing, and commercial-scale development. To promote commercialization of the LIMB technology, EPA is co-funding with industry a demonstration of the LIMB technology on a 105 Megawatt pulverized coal-fired boiler using wall-fired burners. The Agency expects to initiate negotiations in 1986 with interested parties to demonstrate the LIMB technology on a commercial-scale boiler using tangentially-fired burners.

1985 Accomplishments

In 1985, the Agency obligated a total of $17,288,300 supported by 42.0 total workyears for this program, of which $2,582,900 was from the Salaries and Expenses appropriation and $14,705,400 was from the Research and Development appropriation.

During 1985, the Synfuels engineering program provided technical support to EPA regional offices, State and local permitting authorities, in analyzing synthetic fuel-related environmental risks and evaluating discharges and control technologies.

In 1985 EPA awarded a contract to Babcock & Wilcox Co. to develop and conduct a commercial-scale demonstration of the LIMB technology on a wall-fired boiler. The site selected was at the Edgewater Station of the Ohio Edison Company near Lorain, Ohio.

ENVIRONMENTAL PROCESSES AND EFFECTS

1987 Program Request

The Agency requests no resources for this program in 1987. This represents a decrease of $191,400 for the Research and Development appropriation. This program will be completed in 1986.

1986 Program

In 1986, the Agency is allocating a total of $191,400, all of which is from the Research and Development appropriation.

In 1986, research is being concluded on assessing the impacts of oil and gas development on coastal tundra wetlands. Projects underway include: 1) the health effects of urban air particulates (wood smoke), (2) air dispersion modeling in the arctic, and (3) the ecological impacts of placer mining.

1985 Accomplishments

In 1985, the Agency obligated a total of $400,000, all of which was from the Research and Development appropriation. During 1985, the cold climate program conducted research on the impacts of resource development on ecosystems in arctic and sub-arctic regions.

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MANAGEMENT AND SUPPORT

(DOLLARS IN THOUSANDS)

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
APPROPRIATION							
Salaries & Expenses	$287,611.7	$282.913.3	$287,922.0	-$12,381.7	$275,540.3	$295,836.8	$20,296.5
Operations, Research and Facilities	$151.4						
TOTAL, Management & Support	$287,763.1	$282 913.3	$287,922.0	-$12,381.7	$275,540.3	$295,836.8	$20,296.5
PERMANENT WORKYEARS	2,548.4	2,564.8	2,617.0		2,617.0	2,581.8	-35.2
TOTAL WORKYEARS	2,869.6	2,860.4	2,889.0		2,889.0	2,832.9	-56.1
OUTLAYS	$264,338.7	$282,254.3	$298,981.1	-$10,578.7	$288,402.4	$294,056.0	$5,622.2
AUTHORIZATION LEVEL	Authorization is by virtue of the Appropriation Act.						

MANAGEMENT AND SUPPORT

OVERVIEW AND STRATEGY

Management and Support provides executive direction and policy oversight for all Agency programs, as well as those administrative and support services that are not assigned to a specific program. We will continue our efforts to provide quality legal services, promote technically and economically defensible regulatory and policy alternatives, enhance the public's perception of the Agency, manage for environmental results, and pursue a focused human resources management effort to build a skilled career environmental workforce.

The major components of this medium are Program Management, Agency Management, Regional Management, and Support Costs.

Program Management includes policy development, program development and oversight, and the associated management activities for the Agency's environmental program offices. These include the Offices of Air and Radiation, Water, Enforcement and Compliance Monitoring, External Affairs, Pesticides and Toxic Substances, General Counsel, Research and Development, and Solid Waste and Emergency Response.

Agency Management includes Agencywide management functions and policy activities.

Policy Direction, through the Executive Offices at Headquarters, consists of the Administrator and Deputy Administrator and their immediate staffs, Regional Operations, Executive Support, Administrator's Representation Fund, International Activities, Civil Rights, Science Advisory Board, Administrative Law Judges, the Regulatory Information Service Center and Small and Disadvantaged Business Utilization.

Policy, Planning and Evaluation is organized into the following components: the Integrated Environmental Management Program and the Offices of Policy Analysis, Standards and Regulations, and Management Systems and Evaluation.

Legal Services for litigation in which the Agency is a defendant are provided to Agency programs by the General Counsel in Headquarters and by a Regional Counsel in each Regional office. The Office of General Counsel (OGC) provides legal services and advice to the Administrator and Agency managers. OGC, in cooperation with the Department of Justice, represents the Agency in all legal matters in which the Agency is a defendant. Additionally, OGC reviews proposed actions, decisions, and regulations to assure that they are legally defensible.

External Affairs activities are performed by five component offices: Legislative Analysis, Congressional Liaison, Public Affairs, Private and Public Sector Liaison, and Federal Activities.

Inspector General activities include investigation and audit of Agency activities to promote efficiency and effectiveness, and to prevent and detect fraud, waste, and abuse.

Administration and Resources Management provides management activities in Headquarters, as well as administrative services to all program operations located in Cincinnati, Ohio and Research Triangle Park, North Carolina. The office has several components: Program Management, Financial Management, Comptroller, Personnel and Organization, Contracts and Grants, Facilities and Management Services, Information Systems and Services, and Human Resources Management.

Regional Management includes the centralized management and administrative functions performed in each Regional office. The Regional elements cover the Regional and Deputy Regional Administrators, their immediate staffs, and Regional staff for public affairs, congressional and intergovernmental relations, and civil rights. Other activities include budget development and execution, preparation of Regional operating plans, legal services, program planning, regulatory and policy analysis, economic analysis, program evaluation, financial and personnel management, information management, and administrative services.

Support Costs include the costs of general support services for all Agency programs. In this diverse category are:

- Office and building services, such as library services, commercial telephone use, printing and copying, utilities, security, ADP technical support, and custodial and maintenance services for programs located at Headquarters, Research Triangle Park, and Cincinnati;
- Nationwide costs, such as facility rental costs, centralized data processing, professional training, U.S. Postal Service charges, Federal Telecommunications System (FTS) charges, unemployment and workmen's compensation, and health and safety costs for all Agency programs in all locations;
- Office and building services for laboratories and field stations operated by the Offices of Air and Radiation, Research and Development, and Pesticides and Toxic Substances; and
- Common services in Regional offices, such as supplies and equipment, commercial telephones, printing, facilities operations and maintenance, library services, and mini-computer operations.

Program Priorities

Priorities for the Executive Offices in 1987 will include: continued emphasis on enforcement and compliance efforts for both environmental and civil rights regulations; stronger support from Headquarters and Regions to small, minority, and women's environmental businesses; bringing greater scientific credibility to regulatory decision-making through an emphasis on reviews by the Science Advisory Board; and more effective communication between Headquarters and the Regions.

The Office of Policy, Planning and Evaluation will continue to focus resources on managing for environmental results; developing and demonstrating integrated environmental management strategies; and developing improved methods to ascertain benefits of EPA's regulations. It will also support the Agency's Air Toxics initiatives. The common purpose of these efforts is the development of regulatory approaches that achieve environmental and health benefits in an efficient and cost-effective manner.

The Office of General Counsel will continue to provide legal advice and counsel to the Agency's top management and media program offices concerning legal interpretation of EPA administered statutes, other applicable laws, and on such matters as personnel, grants, and contracts. Additionally, the Office of General Counsel will continue to represent the Agency in all major regulatory actions, and ensure that legal errors are avoided and legal positions are presented in the most persuasive manner.

The Office of External Affairs will continue to provide a clear interpretation of EPA's programs and priorities; increase Agency effectiveness by improving Congressional liaison; continue effective liaison with State and local governments; establish outreach programs with the private and public sector and involve citizen participation; reaffirm and strengthen Federal Agency contacts; and provide a cross-media perspective in review of environmental problems.

The Office of Inspector General will continue to emphasize internal and management audits to improve the economy, effectiveness, and efficiency of EPA programs and provide audit coverage to EPA programs and operations which have received little or no audit coverage in the past. It will provide limited audit coverage for the wastewater treatment construction grant program and EPA contracts and other grant programs. The office will continue its investigation of antitrust activities and other construction-related fraud and will aggressively pursue new initiatves to ferret out fraud in the minority business enterprise program and the submission of documentation involving foreign vehicles. It will further its efforts in fraud prevention by publicizing its activities to EPA employees, identifying areas sensitive to fraud, and developing new fraud detection methods.

The Office of Administration and Resources Management will build on progress already achieved in assuring a strong system of financial internal controls, including work toward integration and improvement of all Agency financial management and accounting systems; continue developing a program for better information management planning; pursue a focused human resources management effort to build a skilled career environmental workforce; move to the forefront in achieving significant productivity improvements; and continue to provide essential administrative and support services to enhance the Agency's ability to fulfill its various mandates.

In the Regional management areas, the Agency will continue its commitment to strengthen Regional environmental programs and maintain strong Regional planning and management efforts.

In Support, the program will continue to provide general support services to Agency programs. This request will also enable the Agency to continue its effort to replace obsolete computers in the Regional offices, as well as cover cost escalations such as rent, telephone, and utility rate increases.

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PROGRAM MANAGEMENT

Program Management

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Program Management - Air And Radiation Salaries & Expenses		$2,412.0	$2,904.0	$2,904.2	-$124.9	$2,779.3	$2,904.2	$124.9
	TOTAL	$2,412.0	$2,904.0	$2,904.2	-$124.9	$2,779.3	$2,904.2	$124.9
Program Management - Water Salaries & Expenses		$2,773.1	$2,743.7	$2,671.7	-$114.8	$2,556.9	$2,740.6	$183.7
	TOTAL	$2,773.1	$2,743.7	$2,671.7	-$114.8	$2,556.9	$2,740.6	$183.7
Program Management - Enforcement And Compliance Monitoring Salaries & Expenses		$428.5	$517.6	$416.0	-$17.8	$398.2	$416.7	$18.5
	TOTAL	$428.5	$517.6	$416.0	-$17.8	$398.2	$416.7	$18.5
Program Management - External Affairs Salaries & Expenses		$803.6	$656.0	$711.8	-$30.6	$681.2	$676.2	-$5.0
	TOTAL	$803.6	$656.0	$711.8	-$30.6	$681.2	$676.2	-$5.0
Program Management - Pesticides and Toxic Substances Salaries & Expenses		$1,998.9	$2,573.4	$2,311.1	-$99.3	$2,211.8	$2,216.5	$4.7
	TOTAL	$1,998.9	$2,573.4	$2,311.1	-$99.3	$2,211.8	$2,216.5	$4.7
Program Management - General Counsel Salaries & Expenses		$368.4	$458.1	$458.1	-$19.6	$438.5	$460.7	$22.2
	TOTAL	$368.4	$458.1	$458.1	-$19.6	$438.5	$460.7	$22.2

PROGRAM MANAGEMENT

Program Management

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)								
PROGRAM								
Program Management - Research & Development Salaries & Expenses		$3,919.5	$3,879.4	$3,846.5	-$165.3	$3,681.2	$3,773.7	$92.5
	TOTAL	$3,919.5	$3,879.4	$3,846.5	-$165.3	$3,681.2	$3,773.7	$92.5
Program Management - Solid Waste and Emergency Response Salaries & Expenses		$4,199.1	$1,653.7	$1,653.7	-$71.1	$1,582.6	$1,670.2	$87.6
	TOTAL	$4,199.1	$1,653.7	$1,653.7	-$71.1	$1,582.6	$1,670.2	$87.6
TOTAL: Salaries & Expenses		$16,903.1	$15,385.9	$14,973.1	-$643.4	$14,329.7	$14,858.8	$529.1
Program Management	TOTAL	$16,903.1	$15,385.9	$14,973.1	-$643.4	$14,329.7	$14,858.8	$529.1
PERMANENT WORKYEARS								
Program Management - Air And Radiation		42.6	44.3	44.3		44.3	44.3	
Program Management - Water		41.5	43.3	41.9		41.9	41.9	
Program Management - Enforcement And Compliance Monitoring		9.3	9.0	9.0		9.0	9.0	
Program Management - External Affairs		12.0	10.5	11.5		11.5	12.7	1.2

PROGRAM MANAGEMENT

Program Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Program Management - Pesticides and Toxic Substances	33.8	48.5	41.5		41.5	43.5	2.0
Program Management - General Counsel	8.0	8.2	8.2		8.2	8.2	
Program Management - Research & Development	49.8	41.2	40.7		40.7	41.2	.5
Program Management - Solid Waste and Emergency Response	22.2	28.8	28.8		28.8	30.0	1.2
TOTAL PERMANENT WORKYEARS	219.2	233.8	225.9		225.9	230.8	4.9
TOTAL WORKYEARS							
Program Management - Air And Radiation	46.0	46.8	46.8		46.8	46.8	
Program Management - Water	45.0	46.3	44.9		44.9	44.9	
Program Management - Enforcement And Compliance Monitoring	9.3	9.0	9.0		9.0	9.0	
Program Management - External Affairs	15.2	12.7	13.7		13.7	12.7	-1.0

PROGRAM MANAGEMENT

Program Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Program Management - Pesticides and Toxic Substances	41.2	54.3	47.3		47.3	44.3	-3.0
Program Management - General Counsel	9.9	10.5	10.5		10.5	10.5	
Program Management - Research & Development	55.3	57.7	57.2		57.2	57.2	
Program Management - Solid Waste and Emergency Response	27.7	32.0	32.0		32.0	32.0	
TOTAL WORKYEARS	249.6	269.3	261.4		261.4	257.4	-4.0

MANAGEMENT AND SUPPORT

Program Management

Budget Request

The Agency requests a total of $14,858,800 supported by 257.4 total workyears for 1987, an increase of $529,100 and a decrease of 4.0 total workyears. All of the request is for the Salaries and Expenses appropriation.

Program Description

The Program Management component provides resources generally for Assistant Administrators, Office Directors and their immediate staffs for eight of EPA's major offices: Air and Radiation; Water; Enforcement and Compliance Monitoring; External Affairs; Pesticides and Toxic Substances; General Counsel; Research and Development; and Solid Waste and Emergency Response. Resources provide for formulation of overall management and programmatic policy, and centralized planning and budgeting activities also include the coordination and integration of programs throughout the Agency as well as performing liaison activities with Congress, the Office of Management and Budget and other Federal Agencies and States.

PROGRAM MANAGEMENT - AIR AND RADIATION

1987 Program Request

The Agency requests a total of $2,904,200 supported by 46.8 total workyears, all of which will be for the Salaries and Expenses appropriation. The 1987 request represents an increase of $124,900 total dollars and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. Major program emphases will continue to be implementation of the Clean Air Act Amendments of 1977, the Atomic Energy Act, the Uranium Mill Tailings Radiation Control Act, and development of major decisions related to these acts.

1986 Program

In 1986, the Agency is allocating a total of $2,779,300 supported by 46.8 total workyears, all of which is from the Salaries and Expenses appropriation. This program is providing management support for the Clean Air Act, the Atomic Energy Act, and the Uranium Mill Tailings Radiation Control Act. Key activities include: executive management direction, program planning and analysis, resource management, and budget development. Administrative support to Office of Air and Radiation (OAR) programs is also being provided.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,412,000 supported by 46.0 total workyears, all of which was from the Salaries and Expenses appropriation. The program provided executive management, strategic planning and analysis, and budget and administrative support to OAR programs.

PROGRAM MANAGEMENT - WATER

1987 Program Request

The Agency requests a total of $2,740,600 supported by 44.9 total workyears, all of which will be for the Salaries and Expenses appropriation. This request represents an increase of $183,700 and no change in total workyears from 1986. The increase provides for additional support costs as well as program analysis and evaluation studies to improve overall management of the water quality and drinking water programs.

The 1987 request supports the development of national policy and implementation of the national regulatory programs for the Water Quality and Drinking Water media. Specific activities include: management of the Office of Water operating guidance and accountability system; development of program plans and budget for implementation of Agency policies; development of legislative initiatives and directions and review of regulations and program policies; support to Agency geographic initiatives for crossmedia regulatory control and environmental results management; tracking of budget execution; and administrative management.

1986 Program

In 1986, the Agency is allocating a total of $2,556,900 supported by 44.9 total workyears, all of which is from the Salaries and Expenses appropriation. The program continues to focus in 1986 on the reauthorization of the Clean Water Act and the Safe Drinking Water Act and the accompanying process of strategy development to implement amendments. Activities such as long-range planning and policy analysis, budget development and execution and administrative management will remain ongoing activities.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,773,100 supported by 45.0 total workyears, all of which was from the Salaries and Expenses appropriation. These resources provided for executive management, policy and long range planning and analysis, and budget and administrative support for programs within the Office of Water. Work continued on the reauthorization of the Clean Water Act and Safe Drinking Water Act and implementation of applicable portions of the Resources Conservation and Recovery Act. In addition, the program accomplished the reauthorization of the Marine Protection Research and Sanctuaries Act in 1985.

PROGRAM MANAGEMENT - ENFORCEMENT AND COMPLIANCE MONITORING

1987 Program Request

The Agency requests a total of $416,700 supported by 9.0 workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $18,500 and no change in total workyears from 1986. The dollar increase reflects adjustments to the base as part of government-wide deficit reductions.

This request will be used to provide basic administrative, financial, and management services to the Office of Enforcement and Compliance Monitoring. This includes program planning, personnel management, budgeting, financial management, management analysis and administrative services. These resources will also be used to continue to provide support and oversight of the management operations of the Denver National Enforcement Investigations Center. This level of funding will also provide budget formulation and workload analysis support for the legal enforcement functions of the ten Regional Counsels.

1986 Program

In 1986, the Agency is allocating a total of $398,200 supported by 9.0 total workyears, all of which is from the Salaries and Expenses appropriations.

This program provides program direction and management support for the Office of Enforcement and Compliance Monitoring (OECM). In addition to supporting the Assistant Administrator, it includes the OECM Management Operations functions. The Management Operations staff is responsible for the internal program planning, budget formulation, financial management, and administrative operations for the entire Office of Enforcement and Compliance Monitoring as well as budget formulation support for the enforcement functions of the ten Regional Counsels. The budget formulation activities include leadership in coordination of projections for administrative and judicial enforcement activities in all statutory areas and media for which the Agency is responsible.

1985 Accomplishments

In 1985, the Agency obligated a total of $428,500 supported by 9.3 total workyears, all of which was from the Salaries and Expenses appropriation.

In 1985, this program provided basic program planning, management, personnel, financial, and administrative support services to the Assistant Administrator. In addition, this level provided resources to coordinate formulation of consistent budget requests for enforcement and compliance monitoring activities across all media.

PROGRAM MANAGEMENT - EXTERNAL AFFAIRS

1987 Program Request

The Agency requests a total of $676,200 supported by 12.7 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $5,000 and 1.0 total workyear from 1986. The workyear and dollar decreases reflect a reduction in resources devoted to special projects. In 1987, this office will require these resources to continue the full coordination of the staff offices in External Affairs; to provide the necessary oversight, management, strategies, planning, and support services to these staff offices; and to support the Administrator and Assistant Administrators in coordinating, representing and communicating the Agency's programs and policies to the Congress, the public, other government entities, and the media, as well as involving the Congress, public, government entities and the media for input into the Agency's policies.

1986 Program

In 1986, the Agency is allocating a total of $681,200 supported by 13.7 total workyears, all of which is from the Salaries and Expenses appropriation. Major emphasis will be placed on strengthening our strategies and procedures for communicating better with outside groups by informing affected parties in a timely manner about EPA actions and the decisions and risks the Agency must face.

1985 Accomplishments

In 1985, the Agency obligated a total of $803,600 supported by 15.2 total workyears, all of which was from the Salaries and Expenses appropriation. In 1985, the office initiated procedures and strategies to communicate more effectively with the public and outside groups. This program element provided the management resources, and administrative support necessary to support the Office of External Affairs and staff offices.

PROGRAM MANAGEMENT - PESTICIDES AND TOXIC SUBSTANCES

1987 Program Request

The Agency requests a total of $2,216,500 supported by 44.3 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $4,700 and a decrease of 3.0 total workyears from 1986. The decrease in total workyears will be possible because of more effective use of resources. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

These resources will support senior level management of the Pesticides and Toxic Substances programs as well as the Immediate Office of the Assistant Administrator for Pesticides and Toxic Substances. Key activities include: effective and efficient general management, strategic planning, and administrative and budget support.

1986 Program

In 1986, the Agency is allocating a total of $2,211,800 supported by 47.3 total workyears, all of which is from the Salaries and Expenses appropriation. These resources provide senior level management of the Pesticides and Toxic Substances programs as well as the Immediate Office of the Administrator for Pesticides and Toxic Substances.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,998,900 supported by 41.2 total workyears, all of which was from the Salaries and Expenses appropriation.

PROGRAM MANAGEMENT - GENERAL COUNSEL

1987 Program Request

The Agency requests a total of $460,700 supported by 10.5 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $22,200 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

The request will provide for executive management and planning, budgeting, financial management, management analysis, and administrative support services to the Office of General Counsel.

1986 Program

In 1986, the Agency is allocating a total of $438,500 supported by 10.5 total workyears, all of which is from the Salaries and Expenses appropriation.

The program provides for executive management, planning, budgeting, financial management, management analysis, and administrative support to the Office of General Counsel.

1985 Accomplishments

In 1985, the Agency obligated a total of $368,400 supported by 9.9 total workyears, all of which was from the Salaries and Expenses appropriation.

Activities focused on providing executive management, planning, analytical support, budgeting, financial management, and administrative services to the Office of General Counsel.

PROGRAM MANAGEMENT - RESEARCH AND DEVELOPMENT

1987 Program Request

The Agency requests a total of $3,773,700 supported by 57.2 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $92,500 and no change in total workyears from 1986. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

In 1987, the Office of Research and Development's (ORD) program management activities will provide overall direction, scientific policy guidance and administrative support to a diversified research program which is conducted in Headquarters, in 14 major laboratories and various field sites across the country. These activities will ensure the coordination of research efforts and efficient utilizaton of resources to meet the Agency's research requirements. Specific activities include: the formulation and dissemination of scientific and managerial policy for ORD; the coordination of the research program planning and budgeting cycle, including the development of research strategies and program plans for a balanced and integrated program; the monitoring and analysis of current year resources, research operations and research products; a liaison function, which enables ORD to ascertain regional needs, incorporate these needs into its planning and support regional offices throughout the year as well as work with Congress, OMB and other Federal agencies; and the operation and maintenance of ORD's Information Systems which support research program planning and accountability to senior management. This program supports the smooth operation of ORD.

1986 Program

In 1986, the Agency is allocating a total of $3,681,200 supported by 57.2 total workyears, all of which is from the Salaries and Expenses appropriation. Program management will continue to coordinate and integrate the entire research and development effort of the Agency, ensuring that needs identified by program and Regional Offices are met.

1985 Accomplishments

The Agency obligated a total of $3,919,500 supported by 55.3 total workyears in 1985, all of which was from the Salaries and Expenses appropriation. These resources provided for the overall direction, policy guidance, management analyses, liaison activities, program planning and budgeting, ORD's information systems, and general administrative support.

PROGRAM MANAGEMENT - SOLID WASTE AND EMERGENCY RESPONSE

1987 Program Request

The Agency requests a total of $1,670,200 supported by 32.0 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $87,600 and no change in total workyears from 1986. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. These resources will allow the Agency to continue to staff and operate a complete management team within the Office of Solid Waste and Emergency Response (OSWER). They will provide for a wide array of policy development and analysis activities, institutional and public liaison functions, financial management, and other program support activities necessary to ensure the effective operation of a national program.

1986 Program

In 1986, the Agency is allocating a total of $1,582,600 supported by 32.0 total workyears, all of which is from the Salaries and Expenses appropriation. This level of resources provides for a wide range of support to the Regions and to the Agency as a whole. Expected accomplishments include the review of policy recommendations and proposed regulations; integration of both program and enforcement hazardous waste and Superfund activities; and budget preparation and justification as well as financial management.

1985 Accomplishments

In 1985, the Agency obligated a total of $4,199,100 supported by 27.7 total workyears, all which was from the Salaries and Expenses appropriation. An overall OSWER management plan was implemented, identifying specific measures of success milestones, and performance reviews. OSWER continued integrating hazardous waste and Superfund activities, managing the review of policy recommendations and proposed regulations, including proposed Superfund legislation, and maintaining effective financial management controls.

As the Superfund program was nearing the end of its first five year authorization, the Agency developed and implemented a contingency plan to conserve funds until the Superfund taxing authority is reauthorized. This action has enabled the Agency to continue the program in 1986.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Immediate Office of the Administrator								
Salaries & Expenses		$1,952.3	$1,824.6	$2,285.1	-$98.4	$2,186.7	$2,269.4	$82.7
	TOTAL	$1,952.3	$1,824.6	$2,285.1	-$98.4	$2,186.7	$2,269.4	$82.7
Office of Regional Operations								
Salaries & Expenses		$247.8	$274.5	$328.4	-$14.1	$314.3	$329.9	$15.6
	TOTAL	$247.8	$274.5	$328.4	-$14.1	$314.3	$329.9	$15.6
Office of Executive Support								
Salaries & Expenses		$800.6	$829.8	$796.2	-$34.3	$761.9	$856.1	$94.2
	TOTAL	$800.6	$829.8	$796.2	-$34.3	$761.9	$856.1	$94.2
Regulatory Info. Svc. Center								
Salaries & Expenses		$530.7	$526.3	$517.0	-$22.2	$494.8		-$494.8
	TOTAL	$530.7	$526.3	$517.0	-$22.2	$494.8		-$494.8
Administrator's Representation Fund								
Salaries & Expenses		$2.2	$3.0	$3.0	-$.1	$2.9	$3.2	$.3
	TOTAL	$2.2	$3.0	$3.0	-$.1	$2.9	$3.2	$.3
Office of International Activities								
Salaries & Expenses		$1,134.7	$1,156.8	$1,062.2	-$45.6	$1,016.6	$1,127.9	$111.3
	TOTAL	$1,134.7	$1,156.8	$1,062.2	-$45.6	$1,016.6	$1,127.9	$111.3

AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Office of Civil Rights								
Salaries & Expenses		$1,315.7	$1,096.3	$1,290.6	-$55.7	$1,234.9	$1,276.2	$41.3
	TOTAL	$1,315.7	$1,096.3	$1,290.6	-$55.7	$1,234.9	$1,276.2	$41.3
Science Advisory Board								
Salaries & Expenses		$1,228.8	$1,246.5	$1,242.4	-$53.5	$1,188.9	$1,276.3	$87.4
	TOTAL	$1,228.8	$1,246.5	$1,242.4	-$53.5	$1,188.9	$1,276.3	$87.4
Office of Administrative Law Judges								
Salaries & Expenses		$724.9	$761.8	$751.2	-$32.3	$718.9	$813.0	$94.1
	TOTAL	$724.9	$761.8	$751.2	-$32.3	$718.9	$813.0	$94.1
Office of Small & Disadvantaged Business Utilization								
Salaries & Expenses		$537.8	$457.0	$557.4	-$23.9	$533.5	$516.6	-$16.9
	TOTAL	$537.8	$457.0	$557.4	-$23.9	$533.5	$516.6	-$16.9
TOTAL:								
Salaries & Expenses		$8,475.5	$8,176.6	$8,833.5	-$380.1	$8,453.4	$8,468.6	$15.2
Office of Administrator/Executive Office	TOTAL	$8,475.5	$8,176.6	$8,833.5	-$380.1	$8,453.4	$8,468.6	$15.2
PERMANENT WORKYEARS								
Immediate Office of The Administrator		34.7	30.3	40.3		40.3	40.3	
Office of Regional Operations		4.5	4.0	5.0		5.0	5.0	

AGENCY MANAGEMENT

Office of the Administrator/Executive Office

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Office of Executive Support	21.3	19.2	19.2		19.2	19.2	
Regulatory Information Service Center	4.8	5.0					
Office of International Activities	17.6	19.0	19.0		19.0	19.0	
Office of Civil Rights	21.9	18.8	21.8		21.8	21.8	
Science Advisory Board	11.8	14.1	14.1		14.1	14.1	
Office of Administrative Law Judges	14.3	15.0	15.0		15.0	15.0	
Office of Small & Disadvantaged Business Utilization	8.0	5.1	6.1		6.1	6.1	
TOTAL PERMANENT WORKYEARS	138.9	130.5	140.5		140.5	140.5	
TOTAL WORKYEARS							
Immediate Office of The Adminstrator	37.5	33.3	43.3		43.3	43.3	
Office of Regional Operations	4.5	4.0	5.0		5.0	5.0	

AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Office of Executive Support	24.1	23.8	23.8		23.8	23.8	
Regulatory Information Service Center	5.5	5.0					
Office of International Activities	21.9	22.0	22.0		22.0	22.0	
Office of Civil Rights	23.7	20.8	23.8		23.8	23.8	
Science Advisory Board	19.9	23.9	23.9		23.9	23.9	
Office of Administrative Law Judges	14.3	15.6	15.6		15.6	15.6	
Office of Small & Disadvantaged Business Utilization	8.6	5.9	6.9		6.9	6.9	
TOTAL WORKYEARS	160.0	154.3	164.3		164.3	164.3	

MANAGEMENT AND SUPPORT

Agency Management

Office of the Administrator/Staff Offices

Budget Request

The Agency requests a total of $8,468,600 supported by 164.3 total workyears for 1987, an increase of $15,200 and no change in workyears from 1986. All of the request will be for the Salaries and Expenses appropriation.

Program Description

These resources support the Immediate Office of the Administrator and the staff offices which report directly to the Administrator. The Administrator and Deputy Administrator are responsible for providing policy guidance and direction to the Agency and ensuring implementation of their policies; the staff offices provide cross-cutting Agency guidance for scientific review of regulations and research, international environmental initiatives, as well as civil rights, administrative law hearings, regional communication, and support for small and disadvantaged businesses.

Immediate Office of the Administrator -- This office includes: the Administrator and Deputy Administrator, special assistants to the Administrator and Deputy Administrator for the various program areas, Judicial Officers, and clerical support staff.

Office of Regional Operations -- This office provides Headquarters with a stronger and more effective link to each of the ten Regional offices. This link ensures that the Administrator's policies are effectively communicated to the Regional Administrators, that the Regions are included in the policy-making process, that the Administrator is alerted to any potential Regional problems and concerns, and that significant Regional issues are coordinated with Headquarters program offices.

Office of Executive Support -- This office provides centralized budget planning and implementation, resource management and personnel, computer planning, and administrative support services to the Administrator and staff offices. The office also manages the Agency's correspondence and the Freedom of Information functions.

Regulatory Information Service Center -- The center is responsible for tabulating and compiling information provided by other Federal agencies concerning their regulatory efforts.

Administrator's Representation Fund -- The Fund is used for official receptions and meetings hosted primarily by the Administrator for domestic and foreign officials.

Office of International Activities -- This office provides guidance and management for the Agency's international activities and programs with Western European countries, Japan, and the Agency's Scientific Activities Overseas (SAO) Program. In addition, the Office manages agreements with Canada and Mexico on cross-boundary environmental issues and oversees Agency involvement in the activities of international organizations.

Office of Civil Rights -- This office manages the Agency's civil rights programs. It provides policy guidance to the Administrator and evaluates activities required to carry out the Agency's responsibilities to assure equal opportunity and to prohibit discrimination in employment at EPA.

Science Advisory Board -- The Board consists of a Director, professional and clerical staff, and independent scientists and engineers who advise the Administrator on the scientific and technical bases of the Agency's decisions. They review the scientific basis of regulatory proposals, the adequacy of Agency research and the research planning process, the five-year research and development plan, as well as special requests from the Administrator, the Deputy Administrator and the Congress.

Office of Administrative Law Judges -- Judges from this office preside over and conduct hearings required by the Administrative Procedures Act related to appeals of Agency regulations and decisions.

Office of Small and Disadvantaged Business Utilization -- This office provides Agencywide oversight in implementing programs under Sections 8 and 15 of the Small Business Act, as amended, and develops national policy for EPA for implementing the Agencywide minority and women's business enterprise program.

IMMEDIATE OFFICE OF THE ADMINISTRATOR

1987 Program Request

The Agency requests a total of $2,269,400 supported by 43.3 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $82,700 and no change in total workyears from 1986. The increase reflects greater emphasis on resolving administrative actions. The office is responsible for Agency policy and direction, leadership, management and setting environmental goals. In 1987, emphasis will be put on the Judicial Officer function to review and approve final decisions on Equal Employment Opportunity (EEO) cases that have been coordinated by the Office of Civil Rights (OCR) and to process the expanding number of environmental cases sent to the Administrator for final decision.

1986 Program

In 1986, the Agency is allocating a total of $2,186,700 supported by 43.3 total workyears for this program, all of which is from the Salaries and Expenses appropriation. The major priorities in the Immediate Office are increased emphasis on enforcement and compliance efforts of both environmental and civil rights regulations, continued delegations to State and local governments, and continued support of enhanced science as a basis for decision-making.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,952,300 supported by 37.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The major focus of activity in the Immediate Office was to pursue delegation of programs to State and local governments, support enhanced science as a basis for decision-making and managing risk, and ensure better internal management.

OFFICE OF REGIONAL OPERATIONS

1987 Program Request

The Agency requests a total of $329,900 supported by 5.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $15,600 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The office will continue to ensure that the Administrator's policies are effectively communicated to the Regional Administrators; that the Administrator is alerted to potential Regional problems and concerns; and that the Administrator is assisted in managing significant Regional issues. The office will also increase emphasis on addressing the basic management needs of the Environmental Services Divisions.

1986 Program

In 1986, the Agency is allocating a total of $314,300 supported by 5.0 total workyears, all of which is from the Salaries and Expenses appropriation. The office is continuing to provide a key communications link between the Administrator and the ten Regional offices, and to be involved in Regional budget issues. The office will also put emphasis on providing guidance and coordination for the ten Environmental Services Divisions.

1985 Accomplishments

In 1985, the Agency obligated a total of $247,800 supported by 4.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The Office ensured that the Administrator's policies were effectively communicated to the Regional Administrators, that the Regions were included in the policy-making and decision-making processes, and that the Administrator was kept informed of Regional concerns and issues. In addition, the Office carried out its new responsibility as the Headquarters focal point for the Agency's Environmental Services Divisions.

OFFICE OF EXECUTIVE SUPPORT

1987 Program Request

The Agency requests a total of $856,100 supported by 23.8 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $94,200 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. This office will provide administrative, personnel, and budget support to the Administrator's staff offices and to manage the Agency's correspondence and its Freedom of Information program.

1986 Program

In 1986, the Agency is allocating a total of $761,900 supported by 23.8 total workyears for this program, all of which is from the Salaries and Expenses appropriation. The office is monitoring resource expenditures, developing the outyear budget for the staff offices, providing centralized personnel and administrative support services, and assisting staff offices with recruitment and staffing and property control. The office is continuing to prepare a yearly report to Congress on the cost to the Agency and to the public of administering the Freedom of Information Act, to provide policy and program oversight on the Freedom of Information program, and to manage and track executive and Congressional correspondence.

1985 Accomplishments

In 1985, the Agency obligated a total of $800,600 supported by 24.1 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The office completed monthly financial and operating plan reports, developed the out-year budget for the staff offices and workload analysis for Regional Management, and provided personnel advice and assistance and staffing plan development, administrative services, and resource and computer planning studies for the Administrator's staff offices. The office also logged, controlled, and tracked all Freedom of Information requests, Congressional correspondence, and correspondence addressed to the Administrator and the Deputy Administrator.

REGULATORY INFORMATION SERVICE CENTER

1987 Program Request

No resources are requested for the Regulatory Information Service Center (RISC). This function will be funded by the General Services Administration (GSA) in 1987.

1986 Program

The Regulatory Information Service Center is allocating a total of $494,800, all of which is from the Salaries and Expenses appropriation. The Agency will reimburse GSA for the RISC function under an interagency agreement. The Center will produce the Unified Agenda of Federal Regulations for October 1985 and April 1986 and will continue its monthly analysis of Federal Register Statistics.

1985 Accomplishments

In 1985, the Agency obligated a total of $530,700 supported by 5.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The Center coordinated the publication of the Unified Agenda of Federal Regulations for October 1984 and April 1985. The Center also utilized its automated data base of Federal government regulatory activity and conducted monthly analyses of Federal Register statistics.

ADMINISTRATOR'S REPRESENTATION FUND

1987 Program Request

The Agency requests a total of $3,200 for this program, all of which will be for the Salaries and Expenses appropriation. This reflects an increase of $300 from the 1986 level. This fund will enable the Administrator to host official receptions, meetings, and affairs for visiting dignitaries and officials.

1986 Program

In 1986, the Agency is allocating a total of $2,900 to this program, all of which is from the Salaries and Expenses appropriation, to cover the expenses of official receptions and other functions.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,200 for this function all of which was from the Salaries and Expenses appropriation. This amount covered the expenses of official receptions and other functions.

OFFICE OF INTERNATIONAL ACTIVITIES

1987 Program Request

The Agency requests a total of $1,127,900 supported by 22.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This reflects an increase of $111,300 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The office will continue to manage the Agency's international activities and programs with an active role in bilateral agreements and international organizations. Among the international organizations with which the office will play an active role are the Office for Economic and Cooperation Development, the United Nations Environment Program, and the Economic Commission for Europe. In addition, the office will serve as the Federal Agency Coordinator for the North Atlantic Treaty Organization (NATO) and the Committee on Challenges on Modern Societies (CCMS).

1986 Program

In 1986, the Agency is allocating a total of $1,016,600 supported by 22.0 total workyears to this office, all of which is from the Salaries and Expenses appropriation. The office is continuing to provide guidance, coordination and exchange of scientific and technical information on a regular basis in support of Agency programs and to promote agreed upon approaches to common environmental problems with border countries, including development of an environmental agreement with Mexico to control border sanitation problems and re-negotiation of a Great Lakes Water Quality Agreement.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,134,700 supported by 21.9 total workyears for this program, all of which was from the Salaries and Expenses appropriation. Dealing with border pollution problems with Canada and Mexico dominated the focus of the office. This included negotiations on a transboundary air quality agreement, a joint plan to reduce phosphorous levels in the Great Lakes, cooperative efforts to remedy the pollution in the Niagara River Basin, and negotiations with Mexico concerning a new border agreement on control of border sanitation problems. New initiatives were also taken in support of bilateral cooperation with West Germany, Brazil, China, the Netherlands, USSR, and the Caribbean nations. Emphasis was also directed towards the harmonization of regulatory practices to meet environmental objectives and to facilitate trade and environmental aspects of trade in chemicals and shipment of hazardous wastes.

OFFICE OF CIVIL RIGHTS

1987 Program Request

The Agency requests a total of $1,276,200 supported by 23.8 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This reflects an increase of $41,300 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. In 1987, the Office of Civil Rights will continue to provide technical guidance and direction to the Agency's civil rights efforts; assume responsibility for policy and implementation of the discrimination complaints processing system; expand and improve the Equal Employment Opportunity (EEO) counseling program to resolve complaints through informal conciliation; and strengthen the Special Emphasis programs by conducting seminars and workshops for special emphasis employees and Agency managers.

1986 Program

The Agency is allocating a total of $1,234,900 supported by 23.8 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources are enabling the Office of Civil Rights to continue to provide technical guidance and direction for the Agency's Civil Rights efforts. Increased emphasis is being placed on reducing the average processing time for complaints of discrimination, expanding the special emphasis program management to include full-time Black Employment and Federal Women's program management; and strengthening the Agency's participation in the Historically Black Colleges and Universities program.

1985 Accomplishments

The Agency obligated a total of $1,315,700 supported by 23.7 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The Office of Civil Rights improved the external complaints system, provided training to Office of Civil Rights' staff and Agency managers, expanded Agency-wide recruitment efforts; provided technical guidance and direction for the Agency's civil rights efforts; and provided continuous monitoring of affirmative action plan implementation. This office also expanded and improved the EEO counseling program; strengthened and improved the special emphasis programs; strengthened the Agency's participation in the Historically Black Colleges and Universities Program; and improved the implementation of the Agency's policy on non-discrimination in Federally-assisted programs.

SCIENCE ADVISORY BOARD

1987 Program Request

The Agency requests a total of $1,276,300 supported by 23.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This reflects an increase of $87,400 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The Administrator will identify approximately 64 regulatory issues for the Science Advisory Board (SAB) to review in 1987. The increase in reviews will be performed primarily by the Radiation Effects Committee.

1986 Program

In 1986, the Agency is allocating a total of $1,188,900 supported by 23.9 total workyears for this program, all of which is from the Salaries and Expenses appropriation. The Science Advisory Board is providing expert, independent advice to the Administrator and the Agency on 54 scientific and technical issues facing the Agency.

1985 Accomplishments

The Agency obligated a total of $1,228,800 supported by 19.9 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The SAB was involved in 54 reviews during 1985. Included amoung these reviews were issues relating to hazardous air pollutants, toxic substances, radioactive waste disposal standards, asbestos in drinking water, hazardous waste incineration at sea and on land, nitrogen dioxide health effects, and toxic air pollutants.

OFFICE OF ADMINISTRATIVE LAW JUDGES

1987 Program Request

The Agency requests a total of $813,000 supported by 15.6 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This reflects an increase of $94,100 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. In 1987, this office will continue to preside over and conduct hearings required by the Administrative Procedures Act related to suspension, cancellation, licensing and enforcement actions, including the assessment of civil penalties initiated by the Agency. Preliminary estimates indicate that there will be approximately 1100 cases on the docket, an increase of approximately 200 cases from 1986. The Administrative Law Judges will also continue to adjudicate civil rights cases investigated by the Office of Civil Rights.

1986 Program

In 1986, the Agency is allocating a total of $718,900 supported by 15.6 total workyears, all of which is from the Salaries and Expenses appropriation. The office expects to receive 880 cases from EPA Regional offices in 1986. Of this total, 186 cases are expected to be under the Resource Conservation and Recovery Act (RCRA), 524 cases under the Toxic Substances Control Act (TSCA), and 131 cases under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). In addition, this office is handling a total of 39 cases originating at Headquarters, including suspensions; cancellations; FIFRA; and Clean Air Act cases.

1985 Accomplishments

In 1985, the Agency obligated a total of $724,900 supported by 14.3 total workyears for this program, all of which was from the Salaries and Expenses appropriation. This office maintained a docket of 765 cases. Of these cases, 162 were under RCRA; 450 were under TSCA; and 114 cases were under FIFRA. In addition, the office adjudicated civil rights cases investigated by the Office of Civil Rights.

OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION

1987 Program Request

The Agency requests a total of $516,600 supported by 6.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $16,900 and no change in total workyears from 1986. The decrease reflects adjustments to personnel, compensation and benefit costs based on current staffing patterns. The office will continue to provide technical assistance to both Headquarters and Regional program office personnel to ensure that small, minority and/or women's businesses are receiving a "fair share" of procurement dollars under EPA's Financial Assistance Program. In addition, the Ombudsman is expected to respond to 3,500 inquiries from small firms on regulatory matters.

1986 Program

The Agency is allocating a total of $533,50C supported by 6.9 total workyears for this program, all of which is from the Salaries and Expenses appropriation. In 1986, emphasis is being put on handling additional "Hotline" calls, implementing a Small Business Ombudsman Strategy, creating business regulatory outreach demonstration projects, and promoting Minority Business Enterprise and Women's Business

Enterprise participation in the Agency's financial assistance programs to comply with Executive Order 12432. The office is also assisting in carrying out a White House conference on small business issues preceded by small business conferences in all 50 states.

1985 Accomplishments

In 1985, the Agency obligated a total of $537,800 supported by 8.6 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The office coordinated activities with EPA's procurement and financial assistance programs by providing training and technical assistance; provided assistance toward increasing the level of Minority Business Enterprise/Women's Business Enterprise (MBE/WBE) participation in EPA-assisted programs by creating source lists and a complete Central Resource Directory (CRD) for use by contract officers, program managers and grant recipients, and by developing and implementing indirect procurement policy guidance; and provided technical and managerial assistance to Headquarters and Regional staff assigned to socioeconomic program activities and counseling to minority and women's business in compliance with Executive Order 12432. The office also provided a "Hotline" for small businesses concerning EPA regulations.

AGENCY MANAGEMENT

Office of the Inspector General

(DOLLARS IN THOUSANDS)

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
PROGRAM								
Office of Inspector General								
Salaries & Expenses		$14,331.4	$14,929.3	$14,794.2	-$636.2	$14,158.0	$14,748.7	$590.7
	TOTAL	$14,331.4	$14,929.3	$14,794.2	-$636.2	$14,158.0	$14,748.7	$590.7
TOTAL:								
Salaries & Expenses		$14,331.4	$14,929.3	$14,794.2	-$636.2	$14,158.0	$14,748.7	$590.7
Office of Inspector General	TOTAL	$14,331.4	$14,929.3	$14,794.2	-$636.2	$14,158.0	$14,748.7	$590.7
PERMANENT WORKYEARS								
Office of Inspector General		218.7	221.7	221.7		221.7	218.4	-3.3
TOTAL PERMANENT WORKYEARS		218.7	221.7	221.7		221.7	218.4	-3.3
TOTAL WORKYEARS								
Office of Inspector General		224.5	225.7	225.7		225.7	222.4	-3.3
TOTAL WORKYEARS		224.5	225.7	225.7		225.7	222.4	-3.3

MANAGEMENT AND SUPPORT

Agency Management

Office of Inspector General

Budget Request

The Agency requests a total of $14,748,700 supported by 222.4 total workyears for 1987, an increase of $590,700 and a decrease of 3.3 in total workyears from 1986. All of this request will be for the Salaries and Expenses appropriation.

Program Description

This office is responsible for conducting, supervising, and coordinating audits and investigations relating to EPA programs and operations; promoting economy, efficiency, and effectiveness in the administration of EPA programs; preventing and detecting fraud and abuse in EPA programs and operations; keeping the Administrator and the Congress advised of problem areas and related corrective action; and reviewing EPA regulations and legislation.

OFFICE OF INSPECTOR GENERAL

1987 Program Request

The Agency requests a total of $14,748,700 supported by 222.4 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $590,700 and a decrease of 3.3 in total workyears from 1986. The decrease in workyears reflects decreased need for internal audits and investigations of anti-trust activities and other construction related fraud due to a reduction in the size of the construction grants program. The increase will finance preaward, interim and final audits of grants and contracts requested by Agency management.

The resources requested will be used by the Office of Inspector General (OIG) to continue conducting internal and management audits to improve the economy, effectiveness, and efficiency of EPA programs and provide audit coverage to EPA programs and operations which have received little or no attention in the past. We plan to perform major internal audits in the Office of Research and Development, and the Office of Pesticides and Toxic Substances, and continue coverage of major segments of the air, water, and Resource Conservation and Recovery Act (RCRA) programs. We also plan to continue our program of external audits of grants and contracts which have historically provided $14 in recovered costs for each audit dollar spent.

The OIG will continue its investigations of antitrust activities and other construction-related fraud and will aggressively pursue new initiatives to search for fraud in the minority business enterprise program and submission of fraudulent documentation involving foreign vehicles. It will continue its efforts in fraud prevention, publicizing its activities to EPA employees, identifying areas sensitive to fraud, and developing new fraud detection methods.

1986 Program

In 1986, the Agency is allocating a total of $14,158,000 supported by 225.7 total workyears, all of which is from the Salaries and Expenses appropriation. The Office of Inspector General is continuing its efforts in performing internal and management audits needed to help improve the economy, efficiency, and effectiveness of overall program operations. Primary emphasis is on reviewing programs or areas in which sufficient audit resources have not been devoted in the past. For example, reviews are planned for Regional management of the section 105 air grant program, groundwater compliance with RCRA, and the Office of Mobile Sources enforcement activities. Such reviews protect the environment by ensuring effective program operations and they improve the economy and efficiency of their operating methods.

OIG investigative resources are devoted to conducting criminal investigations relating to EPA programs and operations involving bid rigging and other fraud in EPA-funded construction activities; procurement fraud and false claims; fraud and misconduct involving EPA employees; unlawful disclosure of confidential business information; and administrative investigations of improprieties involving EPA programs and personnel. New initiatives have been aggressively undertaken to identify fraud in the minority business enterprise program and examine submission of fraudulent documentation involving importation of foreign vehicles. Continued efforts are being made to encourage the use of the OIG hotline to uncover instances of suspected fraud, waste, and mismanagement. Under the fraud prevention program, the OIG is providing technical and audit assistance to elements of the Agency assessing the adequacy of internal controls as required by the Federal Managers' Financial Integrity Act of 1982.

1985 Accomplishments

In 1985, the Agency obligated a total of $14,331,400 supported by 224.5 total workyears, all of which was from the Salaries and Expenses appropriation. The Office of Inspector General issued 1,596 audit reports which questioned costs of $162,500,000. On an overall basis, $62,900,000 of costs questioned were sustained by Agency management. During the year, the Agency obtained $2,800,000 of cost efficiencies and $27,100,000 of actual cash recoveries as a result of audit efforts. An expanded internal and management audit program was implemented and about 35 percent of the OIG audit resources were devoted to examining many critical areas which had never been tested in EPA before. Internal audits provided recommendations for improving the effectiveness, efficiency, and results of program operations such as:

1. Required the use of recommended sampling methods for identifying asbestos-in-schools since methods being followed provided limited assurance that asbestos would be found.

2. Strengthened EPA grant administration procedures to ensure that grant awards are made only to States that maintain a required level-of-effort and meet agreed upon commitments.

3. Provided effective management for $7,000,000 of personal property and improving controls to prevent unreasonable or improper payments to contractors.

4. Resolved disputes in a timely manner and charged interest on disputed receivables. The OIG estimates that $1,000,000 may be saved annually.

The OIG opened 445 new investigations and closed 447 investigations, obtaining 32 indictments and convictions. Significant results were achieved in investigations of construction-related fraud, the minority business enterprise program, and the submission of fraudulent documentation involving foreign vehicles.

AGENCY MANAGEMENT

Office of General Counsel

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Office of General Counsel Salaries & Expenses		$6,618.3	$6,632.0	$6,479.0	-$278.7	$6,200.3	$6,414.9	$214.6
	TOTAL	$6,618.3	$6,632.0	$6,479.0	-$278.7	$6,200.3	$6,414.9	$214.6
TOTAL: Salaries & Expenses		$6,618.3	$6,632.0	$6,479.0	-$278.7	$6,200.3	$6,414.9	$214.6
Office of General Counsel	TOTAL	$6,618.3	$6,632.0	$6,479.0	-$278.7	$6,200.3	$6,414.9	$214.6
PERMANENT WORKYEARS								
Office of General Counsel		112.4	121.0	119.3		119.3	119.3	
TOTAL PERMANENT WORKYEARS		112.4	121.0	119.3		119.3	119.3	
TOTAL WORKYEARS								
Office of General Counsel		124.3	131.5	129.8		129.8	126.5	-3.3
TOTAL WORKYEARS		124.3	131.5	129.8		129.8	126.5	-3.3

MANAGEMENT AND SUPPORT

Agency Management

Office of General Counsel

Budget Request

The Agency requests a total of $6,414,900 supported by 126.5 total workyears for 1987, an increase of $214,600 and a decrease of 3.3 total workyears from 1986. All of the request will be for the Salaries and Expenses appropriation.

Program Description

The Office of General Counsel provides legal advice and counsel to the Agency's top management and media program offices concerning legal interpretation of EPA administered statutes, other applicable laws, and such matters as personnel, grants, and contracts. In addition, the program is responsible for litigation activity in which EPA is a defendant. These resources provide legal advice to the Agency in all major regulatory actions, or other Agency actions in which litigation is likely, to ensure that legal error is avoided and legal positions are presented in the most persuasive manner.

GENERAL COUNSEL

1987 Program Request

The Agency requests a total of $6,414,900 supported by 126.5 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $214,600 and a decrease of 3.3 total workyears from 1986. The decrease in workyears reflects a streamlining of program operations. The increase will provide for increased operating costs.

Priority functions in 1987 will include handling all litigation in which EPA is a defendant. It will also include support to: accelerated Resource Conservation and Recovery Act (RCRA) rulemaking; RCRA State authorizations; National Pollutant Discharge Elimination System and Safe Drinking Water Act permit reviews; Federal Insecticide, Fungicide, and Rodenticide Act adjudicatory proceedings; Rebuttable Presumptions Against Registration (special review) and registration standard conclusions; Clean Air Act National Ambient Air Quality Standards revisions; National Emission Standards for Hazardous Air Pollutants; State Implementation Plan reviews; support to assistance programs; bid protests; debarment and suspension oversight; Freedom of Information Act responses; Inspector General; personnel; ethics matters; and consultation and advice regarding such matters as interpretation and implementation of regulations, statutes, and administrative procedures.

1986 Program

In 1986, the Agency is allocating a total of $6,200,300 supported by 129.8 total workyears for this program, all of which is from the Salaries and Expenses appropriation. The 1986 program provides continued support to Agency program priorities through legal advice and assistance, handling defensive litigation, review of Agency rulemaking actions, and participating in selected administrative proceedings.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,618,300 supported by 124.3 total workyears, all of which was from the Salaries and Expenses appropriation. In 1985, the General Counsel supported Agency priorites by providing legal advice and support to Agency managers and by defending the Agency in litigation filed against it. The Office of General Counsel also reviewed regulatory actions to ensure legal defensibility and provided advice on other actions, such as grants, contracts, and personnel matters.

AGENCY MANAGEMENT

Office of External Affairs

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Office of Legislative Analysis								
Salaries & Expenses		$817.9	$941.7	$939.9	-$40.5	$899.4	$945.1	$45.7
	TOTAL	$817.9	$941.7	$939.9	-$40.5	$899.4	$945.1	$45.7
Office of Congressional Liaison								
Salaries & Expenses		$772.6	$937.2	$865.3	-$37.2	$828.1	$867.3	$39.2
	TOTAL	$772.6	$937.2	$865.3	-$37.2	$828.1	$867.3	$39.2
Office of Public Affairs								
Salaries & Expenses		$2,431.1	$2,552.0	$2,489.8	-$107.1	$2,382.7	$2,521.7	$139.0
	TOTAL	$2,431.1	$2,552.0	$2,489.8	-$107.1	$2,382.7	$2,521.7	$139.0
Office of Private and Public Sector Liaison								
Salaries & Expenses		$668.5	$578.4	$638.5	-$27.5	$611.0	$635.2	$24.2
	TOTAL	$668.5	$578.4	$638.5	-$27.5	$611.0	$635.2	$24.2
Office of Federal Activities								
Salaries & Expenses		$1,936.2	$1,637.8	$1,627.4	-$70.2	$1,557.2	$1,675.3	$118.1
	TOTAL	$1,936.2	$1,637.8	$1,627.4	-$70.2	$1,557.2	$1,675.3	$118.1
TOTAL:								
Salaries & Expenses		$6,626.3	$6,647.1	$6,560.9	-$282.5	$6,278.4	$6,644.6	$366.2
Office of External Affairs	TOTAL	$6,626.3	$6,647.1	$6,650.9	-$282.5	$6,278.4	$6,644.6	$366.2

AGENCY MANAGEMENT

Office of External Affairs

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
PERMANENT WORKYEARS							
Office of Legislative Analysis	15.6	13.9	13.9		13.9	13.9	
Office of Congressional Liaison	16.5	19.5	19.5		19.5	19.5	
Office of Public Affairs	43.2	43.6	41.6		41.6	41.6	
Office of Private and Public Sector Liaison	11.0	9.7	11.7		11.7	11.4	-0.3
Office of Federal Activities	30.1	24.8	24.8		24.8	24.8	
TOTAL PERMANENT WORKYEARS	116.4	111.5	111.5		111.5	111.2	-0.3
TOTAL WORKYEARS							
Office of Legislative Analysis	18.9	20.9	20.9		20.9	20.9	
Office of Congressional Liaison	18.4	21.5	21.5		21.5	21.5	
Office of Public Affairs	47.6	48.6	46.6		46.6	46.6	

AGENCY MANAGEMENT

Office of External Affairs

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
(DOLLARS IN THOUSANDS)							
Office of Private and Public Sector Liaison	12.8	9.7	11.7		11.7	11.4	-0.3
Office of Federal Activities	33.6	29.8	29.8		29.8	29.8	
TOTAL WORKYEARS	131.3	130.5	130.5		130.5	130.2	-0.3

MANAGEMENT AND SUPPORT

Agency Management

Office of External Affairs

Budget Request

The Agency requests a total of $6,644,600 supported by 130.2 total workyears for 1987, an increase of $366,200 and a decrease of 0.3 total workyears from 1986. All of the request will be for the Salaries and Expenses appropriation.

Program Description

These resources include the salaries and associated costs for the Immediate Office of the Assistant Administrator, the Office of Congressional Liaison, the Office of Legislative Analysis, the Office of Public Affairs (OPA), the Office of Private and Public Sector Liaison, and the Office of Federal Activities (OFA). The Office of External Affairs provides a clear interpretation of the Agency's program and priorities to increase Agency effectiveness by improving Congressional liaison, by establishing outreach to broaden our public involvement through State and local contacts, public interest groups, and citizen participation, and by reaffirming and strengthening Federal agency contacts.

Office of Legislative Analysis -- This office is responsible for preparing Agency draft legislation, developing testimony for Agency officials to present before Congress, and conducting analyses of environmentally related legislation developed by the Congress. It works closely with the Administrator, the Assistant Administrator for External Affairs, and the program and Regional offices in developing the Agency's legislative program and in guiding specific legislative proposals through the inter-agency legislative review process. This office also maintains the Agency's Legislative Reference Library and provides legislative research services for the Agency.

Office of Congressional Liaison -- This office serves as the principal point of Congressional contact for the Agency. It provides daily summaries of Congressional activities throughout EPA and provides recommendations, advice, and assistance to the Administrator, the Assistant Administrator for External Affairs, and other senior policy officials involved in the development, presentation, and implementation of the Agency's legislative program. The office reviews all Congressional correspondence, responds to Congressional requests for information and Agency publications, and coordinates grant and contract announcements to Congress.

Office of Public Affairs -- This office develops Agency policy for media relations and public information. Activities include: preparing press releases and feature materials for media distribution; responding to press inquiries; conducting press conferences and briefings; coordinating media appearances of key Agency officials; compiling daily and weekly news clips of national press coverage. The office also prepares publications for the general public on major programs and EPA activities; produces newsletters for internal EPA use; supervises the nationwide EPA community relations program to involve citizens in EPA decisions and actions; supports television and radio outlets nationwide with audiovisual materials explaining EPA programs; and reviews all public information materials for conformance to the Agency's Graphics Standards System.

Office of Private and Public Sector Liaison -- This office serves as the Agency's principal point of contact with major national public interest groups, environmental groups, industry representatives, and State and local governments, and advises the Administrator and other Agency officials on the positions and views of these groups and develops appropriate strategies for effective interactions and dialogue with them and their constituencies. The office will continue to emphasize the Administrator's concern for developing cooperation and support for delegating Agency programs to State and local government and for broadening the base of involvement in the Agency's regulatory decision making process.

Office of Federal Activities -- This office develops national policies for dealing with environmental issues and problems associated with Federal agencies. Specifically, OFA: 1) ensures that EPA prepares Environmental Impact Statements (EISs) or Findings of No Significant Impact for those Agency programs specifically covered by the National Environmental Policy Act (NEPA), and assists Agency programs with reviews that are the functional equivalent for those programs that are not specifically covered by NEPA; 2) oversees Federal facility compliance with all EPA pollution control requirements, pursuant to Executive Order 12088; 3) ensures that Federal agencies carry out their activities in an environmentally sound manner pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act; 4) develops policies for dealing with environmental problems on Indian reservations and implements such policies; and 5) in concert with the Army Corps of Engineers, manages the Dredge and Fill program under Section 404 of the Clean Water Act. Finally, in support of the Council on Environmental Quality, OFA files and publishes notices of all Federal Environmental Impact Statements.

OFFICE OF LEGISLATIVE ANALYSIS

1987 Program Request

The Agency requests a total of $945,100 supported by 20.9 total workyears for this office, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $45,700 and no change in total workyears from 1986. This increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. During 1987, the office will continue to ensure that testimony, draft legislation, and analyses and reports on pending and proposed legislation will be developed and provided to the Office of Management and Budget (OMB) and the Congress in a timely fashion and consistent with Agency and Administration policies.

1986 Program

In 1986, the Agency is allocating a total of $899,400 supported by 20.9 total workyears for this office, all of which is from the Salaries and Expenses appropriation. The Office of Legislative Analysis provides leadership and support for special Agency working groups to draft legislative initiatives, develops testimony and provides required reports on legislation to Congress and OMB. In addition to providing technical support to the Agency programs and Regional offices on the major environmental legislation developing in Congress, special attention is devoted to reauthorization of the Comprehensive Environmental Response, Compensation and Liability Act, Clean Air Act, Clean Water Act, Toxic Substances Control Act, and Safe Drinking Water Act. The office is also responsible for representing the Agency in all legislation-related day-to-day contacts with the Office of Management and Budget and other Federal agencies.

1985 Accomplishments

In 1985, the Agency obligated a total of $817,900 supported by 18.9 total workyears for this office, all of which was from the Salaries and Expenses appropriation. The Office developed draft legislative proposals extending the appropriations required for all of EPA's major statutory authorities: Clean Water Act, Clean Air Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, Marine Protection, Research, and Sanctuaries Act, Toxic Substances Control Act, and Federal Insecticide, Fungicide and Rodenticide Act. The Office began preparation of the

1986 legislative program and selected areas in which legislative proposals would be developed in the 99th Congress. The Office developed testimony and related material for 69 hearings, reviewed and responded to 176 bills referred to the Agency from OMB and Congressional Committees, 64 draft legislative reports proposed by other agencies, and 86 statements or testimony of other agencies. The Office also provided recommendations to the President on 17 enrolled bills.

OFFICE OF CONGRESSIONAL LIAISON

1987 Program Request

The Agency requests a total of $867,300 supported by 21.5 total workyears for this office, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $39,200 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide reductions. The continuing use of computerized data bases for routine information functions within Congressional Liaison will enable the staff to deal more rapidly with some types of Congressional requests in 1987. The budget request will enable the office to provide effective day-to-day liaison with the Congress and will ensure that Member and Committee requests are handled in a timely manner.

1986 Program

In 1986, the Agency is allocating a total of $828,100 supported by 21.5 total workyears for this office, all of which is from the Salaries and Expenses appropriation. The Office of Congressional Liaison represents the views of the Agency before Congress and is responsible for the coordination of EPA-related hearings, the briefing of affected Congressional delegations, and the supervision of Congressionally generated casework and all daily interaction with Congressional Members and staff. Special attention in the 99th Congress is being placed on Congressional actions involving such major pieces of legislation as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Clean Water Act, and Safe Drinking Water Act. Action on the Toxic Substances Control Act (TSCA), Clean Air Act, and FIFRA also continue to be significant.

1985 Accomplishments

In 1985, the Agency obligated a total of $772,600 supported by 18.4 total workyears for this office, all of which was from the Salaries and Expenses appropriation. The Office of Congressional Liaison was responsible for all day-to-day Congressional contacts, including more than 200 briefings of members and/or staff, involvement in approximately 80 hearings, and coordination of more than 70 specific Committee investigative information requests.

OFFICE OF PUBLIC AFFAIRS

1987 Program Request

The Agency requests a total of $2,521,700 supported by 46.6 total workyears for this office, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $139,000 and no change in total workyears from 1986. The increase results from increased operating expenses. In 1987, the Office of Public Affairs (OPA) will continue to inform, educate, and involve the public on the issues before the Agency and to promote understanding of the Agency's mission and the Administrator's goals and objectives.

1986 Program

In 1986, the Agency is allocating a total of $2,382,700 supported by 46.6 total workyears for this office, all of which is from the Salaries and Expenses appropriation. In addition to working with the news media and providing informational materials for the general public, OPA is emphasizing: (1) providing leadership and guidance to strengthen EPA community relations activities; (2) improving coordination within the Agency of communication activities related to major Agency actions; and (3) strengthening long-range planning of public information activities in coordination with major EPA program offices and the Regional offices.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,431,100 supported by 47.6 total workyears for this office, all of which was from the Salaries and Expenses appropriation. In addition to the general activities of informing the news media and providing information material to the public, the office improved the cost-effectiveness of the information program by focusing on Agency priority issues of broad concern to the public, strengthened its system for keeping appropriate Agency personnel informed of community relations activities, and provided communications support for major EPA initiatives, including ground-water protection and a national air toxics strategy.

OFFICE OF PRIVATE AND PUBLIC SECTOR LIAISON

1987 Program Request

The Agency requests a total of $635,200 supported by 11.4 total workyears for this office, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $24,200 and a decrease of 0.3 total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide reductions. The decrease results from a planned reduction in administrative personnel. In 1987, the office expects to enhance its program of communication and liaison with State and local elected officials, major intergovernmental constituency organizations (ICOs), private sector organizations and associations, environmental interest groups and the youth constituency. The office will also continue to assist in delegation of environmental programs to State and local governments and will assist all groups with information requests, arranging and attending meetings, and encouraging involvement in the regulatory process.

1986 Program

In 1986, the Agency is allocating a total of $611,000 supported by 11.7 total workyears for this office, all of which is from the Salaries and Expenses appropriation. The office is improving communication with elected State and local officials through regular contact with ICOs and environmental and industry organizations and interest groups; representing the Agency at meetings conducted by ICO environmental committees; developing an Agency policy on the review of ICO contract and grant requests to ensure relevant and cost effective work products; participating in Agency-wide work groups on EPA policy management issues; communicating regularly with elected State and local officials; and providing advice on State and local concerns to senior Agency officials.

1985 Accomplishments

In 1985, the Agency obligated a total of $668,500 supported by 12.8 total workyears for this office, all of which was from the Salaries and Expenses appropriation. During 1985, the office established and improved basic working relationships with intergovernmental constituency organizations, attended and/or addressed numerous meetings of ICO environmental committees, began a series of informal meetings with various business groups, initiated quarterly meetings of the EPA/State Committee and maintained daily dialogue with elected State and local officials.

OFFICE OF FEDERAL ACTIVITIES

1987 Program Request

The Agency requests a total of $1,675,300 supported by 29.8 total workyears for this office, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $118,100 and no change in total workyears from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The Office of Federal Activities (OFA) will maintain oversight concerning EPA's compliance with the National Environmental Policy Act (NEPA), including preparation of the necessary environmental documents for NEPA compliance, such as environmental impact statements (EISs); direct activities to assure compliance by other Federal agencies with all environmental statutes pursuant to Executive Order 12088 and review the budget plans of other agencies to assure adequate funding of abatement projects pursuant to Office of Management and Budget Circular A-106; review other Federal agencies' projects and actions, including their EISs in accordance with section 309 of the Clean Air Act and NEPA; coordinate the implementation of EPA programs on Indian reservations, and manage the Dredge and Fill Program.

1986 Program

In 1986, the Agency is allocating a total of $1,557,200 supported by 29.8 total workyears for this office, all of which is from the Salaries and Expenses appropriation. The office continues to direct activities pursuant to Executive Order 12088 and Office of Management and Budget Circular A-106 related to compliance of Federal installations with environmental regulations; review other Federal actions for potential environmental impact, develop guidance, and direct implementation of EPA policies associated with other Federal agencies, and increase liaison activities with these agencies; oversee the implementation of EPA's Indian Policy; and manage the EPA Dredge and Fill Program.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,936,200 supported by 33.6 total workyears for this office, all of which was from the Salaries and Expenses appropriation. The Office focused its activity on improving allocation and control of funding for the preparation of NEPA documents (Environmental Impact Statements and Findings of No Significant Impacts) implementing new procedures for both review of Federal agency actions and interaction with other agencies as required by NEPA and section 309 of the Clean Air Act; increasing emphasis on compliance of Federal Agencies with Federal statutory environmental requirements; developing and initially implementing an Agency policy on Indian tribes and reservation lands; and strengthening management of the Dredge and Fill Program.

AGENCY MANAGEMENT

Office of Policy, Planning and Evaluation

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Program Management - Policy, Planning And Evaluation								
Salaries & Expenses		$761.2	$832.4	$872.3	-$37.6	$834.7	$826.0	-$8.7
	TOTAL	$761.2	$832.4	$872.3	-$37.6	$834.7	$826.0	-$8.7
Integrated Environmental Management Program								
Salaries & Expenses		$3,412.3	$3,215.5	$3,269.4	-$140.6	$3,128.8	$3,553.6	$424.8
	TOTAL	$3,412.3	$3,215.5	$3,269.4	-$140.6	$3,128.8	$3,553.6	$424.8
Office of Policy Analysis								
Salaries & Expenses		$9,600.3	$9,304.7	$9,201.6	-$395.7	$8,805.9	$9,359.8	$553.9
	TOTAL	$9,600.3	$9,304.7	$9,201.6	-$395.7	$8,805.9	$9,359.8	$553.9
Office of Standards & Regulations								
Salaries & Expenses		$5,000.5	$4,808.8	$4,777.2	-$205.5	$4,571.7	$4,870.7	$299.0
	TOTAL	$5,000.5	$4,808.8	$4,777.2	-$205.5	$4,571.7	$4,870.7	$299.0
Office of Management Systems & Evaluation								
Salaries & Expenses		$2,882.9	$2,872.4	$2,864.5	-$123.2	$2,741.3	$2,611.2	-$130.1
	TOTAL	$2,882.9	$2,872.4	$2,864.5	-$123.2	$2,741.3	$2,611.2	-$130.1
TOTAL:								
Salaries & Expenses		$21,657.2	$21,033.8	$20,985.0	-$902.6	$20,082.4	$21,221.3	$1,138.9
Office of Policy, Planning and Evaluation	TOTAL	$21,657.2	$21,033.8	$20,985.0	-$902.6	$20,082.4	$21,221.3	$1,138.9

AGENCY MANAGEMENT

Office of Policy, Planning and Evaluation

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Program Management - Policy, Planning And Evaluation	12.2	13.0	13.9		13.9	13.9	
Integrated Environmental Management Program	15.4	18.0	20.0		20.0	18.0	-2.0
Office of Policy Analysis	41.0	42.0	52.0		52.0	52.0	
Office of Standards & Regulations	48.2	48.0	58.0		58.0	58.0	
Office of Management Systems & Evaluation	43.2	49.0	49.0		49.0	48.0	-1.0
TOTAL PERMANENT WORKYEARS	160.0	170.0	192.9		192.9	189.9	-3.0

AGENCY MANAGEMENT

Office of Policy, Planning and Evaluation

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Program Management - Policy, Planning And Evaluation	14.5	14.0	14.9		14.9	14.9	
Integrated Environmental Management Program	18.5	20.0	22.0		22.0	22.0	
Office of Policy Analysis	61.5	63.1	63.1		63.1	62.9	-0.2
Office of Standards & Regulations	70.5	68.8	68.8		68.8	67.8	-1.0
Office of Management Systems & Evaluation	53.9	59.0	59.0		59.0	55.0	-4.0
TOTAL WORKYEARS	218.9	224.9	227.8		227.8	222.6	-5.2

MANAGEMENT AND SUPPORT

Agency Management

Office of Policy, Planning and Evaluation

Budget Request

The Agency requests a total of $21,221,300 supported by 222.6 total workyears for 1987, an increase of $1,138,900 and a decrease of 5.2 total workyears from 1986. All of the request will be for the Salaries and Expenses appropriation.

Program Description

The Office of Policy, Planning and Evaluation (OPPE), under the guidance of the Assistant Administrator, directs the Agency's regulation development and review process, formulates Agency policy, and develops planning strategy.

Specifically, OPPE reviews all EPA regulations to ensure consistency with Agency policy, coordinates all internal Agency reviews of regulations, and leads the Agency's regulatory reform activities. OPPE plays an integral role in policy formulation through its analyses of the economic and environmental effects of EPA's regulations, policies, and programs, as well as evaluations of the effectiveness of ongoing Agency programs. Besides developing a framework for a well-run strategic planning process, OPPE ensures that EPA's program objectives and environmental goals are clearly defined and met.

In addition, OPPE provides special studies and analyses to aid Agency decisionmaking processes as well as support for the Agency's air toxics initiatives. Proposals for innovative approaches to integrated environmental management also emanate from OPPE. A brief description of each of the program elements included in OPPE follows:

Program Management - Policy, Planning and Evaluation -- This program element supports the Assistant Administrator's Immediate Office and provides senior OPPE managers with policy direction, program planning, and budgeting and resource management.

Integrated Environmental Management Program -- This program develops an integrated planning and program management strategy to make regulations more consistent and to avoid unnecessary economic or environmental impacts.

Office of Policy Analysis -- This program element contains resources to analyze EPA regulations, policies, and programs from the perspective of their economic and environmental impacts and benefits.

Office of Standards and Regulations -- This office manages the Agency's regulation development and review process, analyzes all of EPA's regulations to ensure technical quality and consistency with Agency policy, designs the Agency's regulatory reform activities, and develops innovative approaches to regulation.

Office of Management Systems and Evaluation -- This program operates the Agency's accountability system, evaluates program effectiveness in meeting Agency goals, and designs and implements necessary management reforms, including a system to manage for environmental results.

PROGRAM MANAGEMENT - POLICY, PLANNING AND EVALUATION

1987 Program Request

The Agency requests a total of $826,000 supported by 14.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $8,700 and no change in total workyears from 1986. The decrease results from adjusting personnel compensation and benefits to meet anticipated requirements based on current staffing patterns.

This request will provide the Assistant Administrator with sufficient staff and resources for the policy direction, special analyses, and budgetary and administrative support necessary to manage OPPE and its component offices efficiently and effectively. Among these activities will be review of EPA statutory authority with a focus on statutory provisions or gaps which fail to allow appropriate consideration of health and environmental effects and program costs when making regulatory decisions, and response to General Accounting Office evaluations of EPA programs.

1986 Program

In 1986, the Agency is allocating a total of $834,700 supported by 14.9 total workyears for this program, all of which is from the Salaries and Expenses appropriation. This program is providing overall policy direction and conducting the activities necessary to manage the component offices of OPPE.

1985 Accomplishments

In 1985, the Agency obligated a total of $761,200 supported by 14.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. These funds supported the basic budgetary, administrative, analytic, and planning activities necessary to manage OPPE.

INTEGRATED ENVIRONMENTAL MANAGEMENT PROGRAM

1987 Program Request

The Agency requests a total of $3,553,600 supported by 22.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $424,800 and no change in total workyears from 1986. The increase reflects part of the Integrated Environmental Management Program's (IEMP) extramural support for the Agency's air toxics initiatives.

These initiatives will include work on a fourth geographic site, focusing on multi-media pollution analysis and control based on IEMP pilot projects at other sites, as well as evaluation of the necessity of addressing air toxics problems on a national level and developing means of tailoring programs to Regional, State, or local problems. IEMP also will work toward completing the Baltimore, Maryland and Santa Clara, California geographic projects; and the five State Pilot Projects for Improved Environmental Decision-Making in Oregon, Kansas, Kentucky, New Jersey, and Maryland. In addition, IEMP will complete development of a user friendly computer program for identifying cost-effective controls in a specific geographic area and work on the pesticides and ocean-dumping models and the pulp and paper and foundry analyses.

1986 Program

In 1986, the Agency is allocating a total of $3,128,800 supported by 22.0 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources are allowing IEMP to continue analyses of the priorities identified in the screening phase for its Baltimore and Santa Clara projects. As part of the Air Toxics Strategy, IEMP is undertaking a national screening program to identify priority geographic sites for multi-media analysis as well as a new site-specific program for multi-media pollution analysis and control. The five State Pilot Projects for Improved Environmental Decision-Making are proceeding. In addition, IEMP is developing its user friendly computer model and continuing to build models applicable to inter-media issues (pesticides application, groundwater, ocean dumping) and to industry sub-sectors (pulp and paper, foundries, and organic chemicals).

1985 Accomplishments

In 1985, the Agency obligated a total of $3,412,300 supported by 18.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. With these resources, IEMP continued its geographic studies in areas such as Baltimore and Santa Clara to further develop strategies for enabling Federal, State, and local governments to jointly develop efficient environmental controls for particular geographic areas. It also initiated a series of smaller projects that are operated at the State or Regional level. In addition, IEMP worked on industry studies applicable to such inter-media issues as sludge, groundwater, pretreatment, hazardous waste strategies, and cropland pollution control.

OFFICE OF POLICY ANALYSIS

1987 Program Request

The Agency requests a total of $9,359,800 supported by 62.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $553,900 and a decrease of .2 total workyears from 1986. The increase in dollars will help in meeting key deadlines under the Resource Conservation and Recovery Act reauthorization.

In 1987, the Office of Policy Analysis (OPA) will continue to oversee the Agency's implementation of Executive Order 12291. It will produce analyses of the Agency's highest priority regulatory actions including major air issues, geographic-based water quality management, implications of proposed Subtitle D standards, initial deep well ban decisions, and the final leaking underground storage tank regulations as well as non-regulation specific initiatives such as geographic-based environmental management (e.g. Great Lakes region), risk and benefits-based enforcement, and issues associated with carbon dioxide build-up and global climate change. Continuing work on chloroflorocarbons (CFC's) will support the United States delegation to the international negotiations on CFC's scheduled to begin in 1987. OPA also will continue to perform analyses of risk management across programs. In addition, OPA's Benefits Program will retain its focus on advanced treatment and pesticides and place new emphasis on materials damage assessment, indoor air quality (radon), and region/site specific benefits analysis. Its Economic Research Program will value reduction of pollution in wetlands, analyze the value of various aspects of State enforcement programs, and undertake new work on the valuation of risk reduction at hazardous waste sites.

1986 Program

In 1986, the Agency is allocating a total of $8,805,900 supported by 63.1 total workyears for this program, all of which is from the Salaries and Expenses appropriation. With these resources, OPA is overseeing implementation of Executive Order 12291, working closely with program offices to evaluate the costs, economic impact, and benefits of prospective regulatory requirements or changes. OPA is concentrating on hazardous waste issues, concluding studies of the macroeconomic impacts of EPA regulations, undertaking analyses of risk management across programs, and performing studies on the combined economic impact of all EPA regulations on major industries as well as several company-or-plant-specific financial analyses. In addition, OPA is working on a major analysis of the risks and benefits of CFC's and other ozone-depleting substances. Its Benefits Program is incorporating benefits analysis in decisions on construction grants and accelerating an important effort to improve risk/benefit techniques applied by the pesticides program. Lastly, OPA's Economic Research Program is renewing promising cooperative agreements with academic researchers to support the development of data and techniques for performing benefit-cost analyses of environmental regulations.

1985 Accomplishments

In 1985, the Agency obligated a total of $9,600,300 supported by 61.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. OPA focused on reviewing existing regulations and standards, which required intensified cost-benefit and cost-effectiveness analysis. OPA placed additional emphasis on intra-industry and cross-industry cost-effectiveness comparison, thoroughly reviewing its existing data base and upgrading and expanding it as necessary. OPA worked on the Congressionally-mandated "Cost of Clean Air and Water" report and continued its strategic studies which examined the cumulative macroeconomic impacts of EPA's regulations on major industries. Additionally, its Benefits Program pursued major efforts to incorporate benefits analysis in a variety of regulatory situations, including development of the Agency's groundwater strategy. And, its Economic Research Program undertook major studies on the benefits of reducing ozone concentrations and on the effectiveness of different information contents on pesticides labels.

OFFICE OF STANDARDS AND REGULATIONS

1987 Program Request

The Agency requests a total of $4,870,700 supported by 67.8 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $299,000 and a decrease of 1.0 total workyears from 1986. The dollar increase mainly results from adjusting personnel compensation and benefits to meet anticipated requirements based on current staffing patterns. The workyear decrease reflects a slight decrease in the need for chemical integration and coordination work.

With this funding, the Office of Standards and Regulations (OSR) will ensure compliance with Executive Orders 12291 and 12498, the Regulatory Flexibility Act, the Paperwork Reduction Act, and Federal Register requirements by continuing its technical, statistical, and policy review of existing regulations as well as those under development. It also will continue regulatory reform efforts, its lead analyst role in the Agency investigation of potential damage caused by leaking underground storage tanks, and its evaluation of methods to control asbestos effectively.

1986 Program

In 1986, the Agency is allocating a total of $4,571,700 supported by 68.8 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources are allowing OSR to manage the Agency's regulation development and review processes, ensure Agency compliance with the Paperwork Reduction Act of 1980, ensure the technical quality of Agency regulations and policies, improve the statistical quality of Agency regulations and data collection and analysis activities, and ensure integration of the Agency's regulatory programs on chemicals across program offices. In addition, OSR is continuing to initiate and promote sound regulatory reforms, such as demonstration and implementation of innovative water reforms; development of non-point source strategies for abatement of pollution, including contamination of groundwater; and provision of technical assistance on emissions trading and development of Agency policy on related air program reforms.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,000,500 supported by 70.5 total workyears for this program, all of which was from the Salaries and Expenses appropriation. OSR continued its effective management and oversight of the regulation development and review process ensuring compliance with Executive Orders 12291 and 12498, the Regulatory Flexibility Act, the Paperwork Reduction Act, and Federal Register requirements. OSR intensified regulatory reform and relief efforts and continued to concentrate on improving the scientific, engineering, and statistical base for regulations and policies. Negotiation was successfully demonstrated and continued to be used as an alternative regulation development method. OSR published an Agency Environmental Auditing Policy, developed statistical sampling methods for hazardous waste sites, and developed and tested a methodology for setting Agency priorities for regulatory action.

OFFICE OF MANAGEMENT SYSTEMS AND EVALUATION

1987 Program Request

The Agency requests a total of $2,611,200 supported by 55.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $130,100 and a decrease of 4.0 total workyears from 1986. The dollar and workyear reductions primarily reflect transfer of the General Accounting Office liaison function out of the Office of Management Systems and Evaluation (OMSE) to the Immediate Office of OPPE's Assistant Administrator. Dollars also were adjusted to reflect anticipated personnel compensation and benefits based on current staffing levels.

These resources will enable OMSE to assess whether Agency goals and program commitments are being met and what corrective actions should be taken if weaknesses are detected. To accomplish this, OMSE will carry out evaluations of major programs or program components and perform short-term management reviews. It will operate a special tracking system for the Deputy Administrator as well as the management accountability system, ensuring its integration with other Agency management systems. OMSE also will develop agency-wide planning guidance, assist in the development of program strategies, and further develop an integrated Agency strategic planning system encompassing all media. The Regional Administrator's Environmental Management Reports will continue under OMSE auspices as will cooperation between Headquarters and the Regional offices in developing improved indicators of environmental status and trends and improved monitoring strategies.

1986 Program

In 1986, the Agency is allocating a total of $2,741,300 supported by 59.0 total workyears for this program, all of which is from the Salaries and Expenses appropriation. With this funding, OMSE is assessing the Agency's effectiveness in meeting program goals and commitments by conducting evaluations of major programs, by running the management accountability system, by performing a number of quality assurance reviews, and by developing and recommending corrective actions where the need for improvement is identified. It is developing mechanisms for connecting the accountability system, which measures each program's progress in meeting its goals and commitments, with other Agency management systems. OMSE also is focusing its efforts on strategic planning, in close cooperation with the program offices. In addition, OMSE is working with Headquarters and Regional offices to develop improved indicators of environmental status and trends, and improved monitoring strategies and is aiding in some of the State Pilot Projects for Improved Environmental Decision Making.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,882,900 supported by 53.9 total workyears for this program, all of which was from the Salaries and Expenses appropriation. OMSE held a pivotal role in helping to develop the Agency's Air Toxics Strategy. It carried out major evaluations on the effectiveness of the National Notification System for Emergency Response to Releases of Hazardous Substances, the implementation of the National Municipal Policy, and Incineration of Liquid Hazardous Wastes. OMSE also took the lead on the Performance-Based Grants Policy Task Force resulting in increased Federal-state coordination. In addition, OMSE expanded efforts to implement and refine the accountability system for the Administrator, designing a fully automated system and developing specialized tracking systems for individual programs.

AGENCY MANAGEMENT

Office of Administration and Resource Management

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Program Management - Administration								
Salaries & Expenses		$1,292.1	$1,395.2	$1,370.5	-$58.8	$1,311.7	$1,359.2	$47.5
	TOTAL	$1,292.1	$1,395.2	$1,370.5	-$58.8	$1,311.7	$1,359.2	$47.5
Financial Management Headquarters								
Salaries & Expenses		$5,842.0	$5,032.7	$5,445.1	-$234.1	$5,211.0	$5,404.4	$193.4
and Facilities		$9.5						
	TOTAL	$5,851.5	$5,032.7	$5,445.1	-$234.1	$5,211.0	$5,404.4	$193.4
Office of the Comptroller								
Salaries & Expenses		$3,545.5	$3,253.6	$3,197.5	-$136.6	$3,060.9	$4,976.6	$1,915.7
Operations, Research and Facilities		$90.0						
	TOTAL	$3,635.5	$3,253.6	$3,197.5	-$136.6	$3,060.9	$4,976.6	$1,915.7
Contracts and Grants Management								
Salaries & Expenses		$9,676.5	$9,355.6	$10,149.6	-$436.6	$9,713.0	$9,796.8	$83.8
	TOTAL	$9,676.5	$9,355.6	$10,149.6	-$436.6	$9,713.0	$9,796.8	$83.8
Personnel and Organization Services								
Salaries & Expenses		$7,256.7	$7,630.7	$7,540.1	-$324.1	$7,216.0	$7,472.0	$256.0
	TOTAL	$7,256.7	$7,630.7	$7,540.1	-$324.1	$7,216.0	$7,472.0	$256.0

AGENCY MANAGEMENT

Office of Administration and Resource Management

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Facilities & Management Services								
Salaries & Expenses		$6,722.4	$6,930.8	$6,604.6	-$284.0	$6,320.6	$6,484.8	$164.2
	TOTAL	$6,722.4	$6,930.8	$6,604.6	-$284.0	$6,320.6	$6,484.8	$164.2
Information Systems & Services								
Salaries & Expenses		$6,606.5	$6,844.8	$7,313.5	-$314.5	$6,999.0	$7,211.2	$212.2
	TOTAL	$6,606.5	$6,844.8	$7,313.5	-$314.5	$6,999.0	$7,211.2	$212.2
Office of Human Resources Management								
Salaries & Expenses		$1,131.4	$1,166.3	$1,192.6	-$51.2	$1,141.4	$1,151.1	$9.7
	TOTAL	$1,131.4	$1,166.3	$1,192.6	-$51.2	$1,141.4	$1,151.1	$9.7
TOTAL:								
Salaries & Expenses		$42,073.1	$41,609.7	$42,813.5	-$1,839.9	$40,973.6	$43,856.1	$2,882.5
Operations, Research and Facilities		$99.5						
Office of Administration and Resource Management	TOTAL	$42,172.6	$41,609.7	$42,813.5	-$1,839.9	$40,973.6	$43,856.1	$2,882.5

AGENCY MANAGEMENT

Office of Administration and Resource Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Program Management - Administration	22.2	20.8	21.8		21.8	20.3	-1.5
Financial Management Headquarters	120.1	120.5	131.5		131.5	133.2	1.7
Office of the Comptroller	59.7	61.9	62.9		62.9	61.5	-1.4
Contracts and Grants Management	207.2	214.5	230.3		230.3	219.9	-10.4
Personnel and Organization Services	160.7	160.0	162.0		162.0	159.8	-2.2
Facilities & Management Services	181.8	186.2	179.0		179.0	171.5	-7.5
Information Systems & Services	122.3	121.2	132.2		132.2	130.5	-1.7
Office of Human Resources Management	21.5	23.0	24.0		24.0	22.5	-1.5
TOTAL PERMANENT WORKYEARS	895.5	908.1	943.7		943.7	919.2	-24.5

AGENCY MANAGEMENT

Office of Administration and Resource Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Program Management - Administration	24.0	22.8	22.8		22.8	21.3	-1.5
Financial Management Headquarters	127.9	130.0	141.0		141.0	141.0	
Office of the Comptroller	67.1	69.3	69.3		69.3	67.9	-1.4
Contracts and Grants Management	218.2	222.4	236.2		236.2	225.8	-10.4
Personnel and Organization Services	179.0	179.9	181.7		181.7	178.1	-3.6
Facilities & Management Services	191.3	195.9	186.1		186.1	178.6	-7.5
Information Systems & Services	136.3	138.5	149.3		149.3	144.5	-4.8
Office of Human Resources Management	23.7	24.0	25.0		25.0	23.5	-1.5
TOTAL WORKYEARS	967.5	982.8	1,011.4		1,011.4	980.7	-30.7

MANAGEMENT AND SUPPORT

Agency Management

Office of Administration and Resources Management

Budget Request

The Agency requests a total of $43,856,100 supported by 980.7 total workyears for 1987, an increase of $2,882,500 and a decrease of 30.7 total workyears from 1986. All of the request is for the Salaries and Expenses appropriation.

Program Description

The Office of Administration and Resources Management (OARM) performs administrative management and support functions to all of EPA, and provides a full range of administrative services to Headquarters and our two largest non-regional field operations -- Research Triangle Park (RTP), North Carolina and Cincinnati, Ohio. The office also controls the Agency's central planning and budgeting process which allocates workyear and financial resources among program areas and ensures adequate funds control. In addition, the office directs a Human Resources Management program for all Agency employees.

The Immediate Office of the Assistant Administrator provides overall program direction and resource management for all office activities, as well as Agencywide administrative support policy. There are six organizational components under the Assistant Administrator for Administration and Resources Management: Office of the Comptroller, Office of Administration, Office of Information Resources Management, Office of Human Resources Management, and the Offices of Administration at Research Triangle Park and Cincinnati. The Office of the Comptroller provides Agencywide financial services as well as budget development and execution activities. The Office of Administration provides services in the areas of personnel administration, facilities management, organizational analysis, contracts and grants management, and occupational health and safety. The Office of Information Resources Management directs the Agency's information resources management program and library services. The Office of Human Resources Management provides workforce planning, career development, and executive management services to EPA employees. Our RTP and Cincinnati offices provide administration services to the environmental programs at EPA's major research locations. A brief description of each of the program elements included in this office follows:

Program Management - Administration -- This component consists of the Assistant Administrator's immediate office which provides oversight, planning functions, and performs all of the budgeting and resource management activities for OARM.

Financial Management - Headquarters -- This component includes financial management, financial policy development, accounting, and financial reporting activities for Headquarters and field offices.

Office of the Comptroller -- This component develops and operates EPA's program planning and budgeting system; analyzes and prepares Agency budgets for submission to Congress and OMB; maintains the Agency's allocation, control, and review system for all workyear and financial resources; and oversees EPA's management efficiency programs.

Contracts and Grants Management -- This component establishes Agencywide contracts and grants policy, awards and manages Headquarters grants and other financial assistance programs, and awards and administers contracts and small purchases at Headquarters, Research Triangle Park, and Cincinnati.

Personnel and Organization Services -- This component provides personnel services at Headquarters, Cincinnati, and Research Triangle Park, as well as Agencywide management analysis, and occupational health and safety functions.

Facilities and Management Services -- This component provides facilities management services to EPA operations in Headquarters, Cincinnati, and Research Triangle Park.

Information Systems and Services -- This component provides Agencywide ADP systems management as well as library services at Headquarters, Cincinnati, and Research Triangle Park.

Human Resources Management -- This component provides Agencywide workforce planning, career development, and executive management services to EPA employees.

PROGRAM MANAGEMENT - ADMINISTRATION

1987 Program Request

The Agency requests a total of $1,359,200 supported by 21.3 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $47,500 and a decrease of 1.5 total workyears from 1986. The decrease in workyears reflects a reduction to the staffing level in the Assistant Administrator's Immediate Office. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. In 1987, the office will continue to provide guidance and direction as well as program and administrative support for OARM, direct and manage OARM's resources, administer and report on OARM's portions of the Administrator's Action Tracking System and the Strategic Planning and Management System, and conduct strategies to enhance the efficiency and effectiveness of the Agency.

1986 Program

In 1986, the Agency is allocating a total of $1,311,700 supported by 22.8 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources are used for overall policy direction and guidance to the Agency's management programs, review of organization and consolidation issues, continued strengthening of EPA's financial, budgetary, contracts, and information resources management programs, as well as initiation of management effectiveness strategies within the Agency.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,292,100 supported by 24.0 total workyears for this program all of which was from the Salaries and Expenses appropriation. These resources were used to provide office-wide management and policy direction, manage the development and execution of OARM's budget, provide Action Tracking and Strategic Planning and Management reports, and conduct special analyses and projects on Agencywide management issues.

FINANCIAL MANAGEMENT - HEADQUARTERS

1987 Program Request

The Agency requests a total of $5,404,400 supported by 141.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $193,400 and no change in total workyears from 1986. The increase will provide for further automation as a result of financial management initiatives from the Department of Treasury, the General Accounting Office and the Office of Management and Budget. The office's priorities in 1987 will include the following initiatives: implement Office of Management and Budget's Circular A-127 requirements, implement Section 4 of the Federal Managers' Financial Integrity Act of 1982, increase the timeliness of contracts processed as required by the Prompt Payment Act, explore further cash management initiatives, and bring the Financial Management System into full compliance with General Accounting Office standards.

These resources will also provide the necessary workyears for the program to improve the overall quality of financial and accounting services throughout the Agency, provide financial reports to meet Office of Management and Budget and Treasury requirements, manage the Agency's Financial Management System, and develop and refine Agency financial policies and procedures.

1986 Program

In 1986, the Agency is allocating a total of $5,211,000 supported by 141.0 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources provide a full array of financial services to EPA managers, including payroll, accounting, debt collection, accounts payable and policy guidance. This program manages the Agency's Financial Management System. The 1986 program emphasis is on improving the financial services provided by Headquarters and Research Triangle Park financial operations, the development of standard quality assurance programs for the Agency, development of a long-term planning process for the Financial Management System, completion of a Comptroller Directives System for consolidation of all financial policies and procedures, and transfer of the software programs to operate the Financial Management System at the National Computer Center.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,851,500 supported by 127.9 total workyears, of which $5,842,000 was from the Salaries and Expenses appropriation and $9,500 was from the Operations, Research, and Facilities appropriation. With these resources, the Agency provided routine financial services, automated various payroll activities, developed financial policy, performed internal control reviews, performed accounting systems reviews to assure compliance with the new standards of internal control established by the Comptroller General of the United States, continued a comprehensive cash management program, including implementation of the Diners Club Program and Treasury's Letter of Credit process, and maintained adequate financial controls for the Agency.

OFFICE OF THE COMPTROLLER

1987 Program Request

The Agency requests a total of $4,976,600 supported by 67.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $1,915,700 and a decrease of 1.4 total workyears from 1986. The increase in funds is for the continued implementation of OMB Circular A-127, a major initiative which will integrate and improve the Agency's financial management systems. The decrease in total workyears results from the increased use of office automation in budget analysis and reporting functions.

These resources will provide the Office of the Comptroller with the capabilities to perform all mandatory activities associated with OMB and Congressional budget submissions for 1987 and 1988, provide budget analyses and reports to Agency program offices through the Resource Planning and Budgeting System, and maintain an allocation, control and review system for all workyear and financial resources. The office will focus on implementing EPA's Productivity Improvement Initiative, which will reduce costs and enhance program effectiveness across the Agency. The Comptroller will also continue to implement the Federal Managers' Financial Integrity Act, and implement OMB Circular A-76.

1986 Program

In 1986, the Agency is allocating a total of $3,060,900 supported by 69.3 total workyears for this program, all of which is from the Salaries and Expenses appropriation. With these resources the Office of the Comptroller develops current and outyear budget guidance to program and Regional offices, analyzes budget issues, develops and implements Agency budget policy, and administers and provides policy guidance to EPA managers on a range of fiscal concerns. Particular emphasis is being placed on improving funds control and budget planning. The office is also leading the Agency's effort to implement OMB Circular A-127.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,635,500 supported by 67.1 total workyears for this program, of which $3,545,500 was from the Salaries and Expenses appropriation and $90,000 was from the Operations, Research, and Facilities appropriation. With these resources, this program managed the development of the 1986 Operating Plans, provided budget and policy guidance to program and Regional offices for the 1987 budget request, performed oversight of audit resolution and follow-up, implemented the Federal Managers' Financial Integrity Act, and began EPA's Productivity Improvement Initiative.

CONTRACTS AND GRANTS MANAGEMENT

1987 Program Request

The Agency requests a total of $9,796,800 supported by 225.8 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $83,800 and a decrease of 10.4 total workyears from 1986. The decrease in workyears reflects anticipated reductions in the contracts and grants workload during 1987. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

In the contracts area, the request will enable the Agency to process and award new contracts and purchase orders, manage and close out existing contracts, evaluate contractor cost proposals, process contract terminations and claims, and provide technical review, policy compliance, and administrative oversight and management to the three contracting and purchasing offices in Headquarters, Cincinnati, and Research Triangle Park (RTP).

In the grants area, these funds will allow the Agency to develop and interpret policy and procedural guidance for Agencywide assistance programs, award and administer Headquarters grants, cooperative agreements, and interagency agreements, respond to requests for assistance from Regions and Federal assistance recipients, continue to modify, update, and simplify our assistance regulations, increase in-house audit and cost analyses, increase noncompliance efforts against program participants who abuse the privileges of Federal assistance, and meet OMB Circular A-127 requirements.

1986 Program

In 1986, the Agency is allocating a total of $9,713,000 supported by 236.2 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources are being used to perform a full range of grants and contracts activities that include awarding and administering contracts, grants, loans, purchase orders, and interagency agreements. This also includes negotiating indirect cost rates, processing terminations and claims, providing administrative management over contracting offices at Headquarters, Cincinnati and RTP, developing suspension and debarment cases under EPA assistance and procurement programs, addressing policy development, internal review and systems management issues in both the contracts and grants areas, supporting A-127 initiatives, instituting a new automated assistance document system, and providing project officer training.

1985 Accomplishments

In 1985, the Agency obligated a total of $9,676,500 supported by 218.2 total workyears for this program, all of which was from the Salaries and Expenses appropriation. The major accomplishments in this program area included increased emphasis on contract management, continued implementation of the Federal Acquisition Regulation, improving the contract planning system and automated procurement document system, implementing the new Asbestos School Hazard Abatement Program, developing the Grants Information System Management Council, continuing to simplify grants procedures, and taking noncompliance actions against and recovering Federal funds from program participants who abuse the privileges of Federal assistance.

PERSONNEL AND ORGANIZATION SERVICES

1987 Program Request

The Agency requests a total of $7,472,000 supported by 178.1 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $256,000 and a decrease of 3.6 total workyears from 1986. The decrease in total workyears reflects an anticipated reduced rate of hiring during 1987. The increase will provide for increased operating costs.

This program will continue to perform ongoing personnel functions including recruitment, position management, classification, performance management, pay administration, personnel and payroll processing, labor-management and employee-management relations, personnel information systems management, equal opportunity employment, and technical assistance and advisory services. Efforts will also focus on performing management and organization improvement analyses, managing delegations of authority and reorganizations, developing Agency forms, overseeing EPA public advisory committees, and directing the Agency's directives system. Finally, the program will continue coordination and management of Agencywide health and safety programs.

1986 Program

In 1986, the Agency is allocating a total of $7,216,000 supported by 181.7 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources support high quality and responsive personnel services, implementation of human resources initiatives including improvement to the Performance Management System and development of a comprehensive curriculum for managers, improved utilization of personnel information systems including development of core management reports, and continued support to meet the Agency's specialized recruitment needs. The resources also provide for performance of additional management reviews with the primary focus on Headquarters offices, expansion of management and organization services to Regional and Headquarters offices, implementation of Agency health and safety programs, development of Environmental Compliance Audit Guidelines, and performance of environmental compliance audits for EPA facilities.

1985 Accomplishments

In 1985, the Agency allocated a total of $7,256,700 supported by 179.0 total workyears for this program, all of which was from the Salaries and Expenses appropriation. With these resources the Agency continued efforts to meet specialized and hard-to-fill recruitment needs, conducted an Agencywide Performance Management System (PMS) survey, issued a comprehensive PMS planning package, designed a new award for unusually outstanding merit pay employees, developed a labor relations handbook for supervisors, conducted negotiations with employee unions on sensitive management issues, and expanded automated personnel data bases and improved information systems capabilities. These resources also provided management assistance to virtually every EPA office resulting in organizational and management improvements ranging from strengthened management processes to streamlined organizational arrangements.

FACILITIES AND MANAGEMENT SERVICES

1987 Program Request

The Agency requests a total of $6,484,800 supported by 178.6 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $164,200 and a decrease of 7.5 total workyears from 1986. The reduction in workyears represents a decrease in staff for the Headquarters printing and publication activities, as well as consolidation of like facilities functions and elimination of nonessential services. The increase will provide for increased operating costs. With these resources the Agency will administer the Nationwide Support, Headquarters Support, and Buildings and Facilities budgets, provide operational support and housekeeping services, and monitor and direct contractor resources under support contracts.

1986 Program

In 1986, the Agency is allocating a total of $6,320,600 supported by 186.1 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These funds are being used to provide timely, high quality and cost effective facilities management and support services for EPA facilities in Washington, Research Triangle Park (RTP), North Carolina and Cincinnati, Ohio. These resources provide ongoing services in the areas of property and space management, building operational services, office support services, real estate and lease enforcement support, transportation management, printing and publication operations, security services, and facilities design and construction management.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,722,400 supported by 191.3 total workyears for this program, all of which was from the Salaries and Expenses appropriation. With these resources the Agency provided facilities management services to EPA facilities in Washington, RTP and Cincinnati, established better administrative controls over property management, managed space needs and provided security services.

In addition, the Agency administered the Buildings and Facilities program which included managing health and safety improvements and routine and emergency repairs to our facilities across the country. This program supervised the start of construction of the wildlife toxicology facility for the Environmental Research Laboratory at Corvallis, Oregon, and the pollution statement facility at the Environmental Research Laboratory in Narragansett, Rhode Island. The program also initiated the design of a full containment facility in Cincinnati, Ohio and a new radiation laboratory in Montgomery, Alabama.

INFORMATION SYSTEMS AND SERVICES

1987 Program Request

The Agency requests a total of $7,211,200 supported by 144.5 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $212,200 and a decrease of 4.8 total workyears from 1986. The decrease in workyears results from the increased use of contractors for support services. The increase will provide for increased operating costs. The requested resources will enable the Agency to maintain current, centrally administered information systems and services in support of EPA programs and the public. This program will provide the personnel to manage the Agency's central and distributed computing and data transmission network, its major administrative and programmatic data systems and library services. In addition, these resources will permit the Agency to continue to develop a program of information resources management including long and short-range Automated Data Processing (ADP) planning, ADP security, records management, software and data standards, and internal controls on information resources. Particular emphasis will be placed on providing technical support for the Regional ADP Modernization effort.

1986 Program

In 1986, the Agency is allocating a total of $6,999,000 supported by 149.3 total workyears for this program, all of which is from the Salaries and Expenses appropriation. This level of funding includes the transfer of voice communications functions from the Office of Administration to the Office of Information Resources Management as part of an effort to integrate voice and data communications planning and management.

Also during 1986, particular emphasis is being placed on improved information systems planning by EPA programs, strengthening information security, and continuing the program to implement and update Agency financial management systems in response to General Accounting Office (GAO) and Executive Branch requirements. In addition, the Agency is establishing more vigorous software engineering standards as part of a program to assure cost-effective performance by ADP systems contractors.

1985 Accomplishments

In 1985, the Agency obligated a total of $6,606,500 supported by 136.3 total workyears for this program, all of which was from the Salaries and Expenses appropriation. During 1985, particular emphasis was placed on improving the Agency's enforcement and hazardous waste information systems. In addition, the Agency updated its accounting systems in response to GAO requirements and strengthened internal controls in the Agency payroll and accounts receivable systems.

OFFICE OF HUMAN RESOURCES MANAGEMENT

1987 Program Request

The Agency requests a total of $1,151,100 supported by 23.5 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $9,700 and a decrease of 1.5 total workyears from 1986. The decrease in workyears reflects a lower workyear need due to completion of the initial planning phases of career development and workforce planning activities. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. This level of funding will allow the Agency to continue its initiative to develop its workforce to meet future needs and skill mix requirements. Also, the Office of Human Resources Management will continue to design and implement a comprehensive program to focus on career and organizational development, workforce planning, and senior executive management.

1986 Program

In 1986, the Agency is allocating a total of $1,141,400 supported by 25.0 total workyears for this program, all of which is from the Salaries and Expenses appropriation. These resources are being used to build a total career development system at EPA and provide workforce planning and management guidance to help EPA anticipate its hiring and retraining needs. A training institute is being established to use in-house employees to meet part of the Agency's training needs. In addition, these resources are used to perform personnel operations for Senior Executive Service (SES) members and to develop a human resources information system.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,131,400 supported by 23.7 total workyears for this program, all of which was from the Salaries and Expenses appropriation. During this first full year of program operation, work began on career development programs for the Agency's scientific, technical, and managerial employees. Workforce planning pilot studies were initiated, and personnel operations for the Senior Executive Service were improved.

ENVIRONMENTAL PROTECTION AGENCY

1987 Budget Estimate

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REGIONAL MANAGEMENT

Regional Management

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Resource Management - Regions Salaries & Expenses		$1,396.2	$1,537.7	$1,638.7	-$70.5	$1,568.2	$1,547.2	-$21.0
	TOTAL	$1,396.2	$1,537.7	$1,638.7	-$70.5	$1,568.2	$1,547.2	-$21.0
Financial Management - Regions Salaries & Expenses		$2,733.7	$2,816.6	$2,771.7	-$119.2	$2,652.5	$2,693.4	$40.9
	TOTAL	$2,733.7	$2,816.6	$2,771.7	-$119.2	$2,652.5	$2,693.4	$40.9
Personnel Management - Regions Salaries & Expenses		$3,293.1	$3,228.1	$3,148.8	-$135.3	$3,013.5	$3,015.1	$1.6
	TOTAL	$3,293.1	$3,228.1	$3,148.8	-$135.3	$3,013.5	$3,015.1	$1.6
Administrative Management - Regions Salaries & Expenses		$5,713.0	$5,512.9	$5,608.7	-$241.2	$5,367.5	$5,492.5	$125.0
	TOTAL	$5,713.0	$5,512.9	$5,608.7	-$241.2	$5,367.5	$5,492.5	$125.0
Regional Management Salaries & Expenses		$9,710.6	$9,053.5	$9,351.3	-$402.1	$8,949.2	$9,389.7	$440.5
	TOTAL	$9,710.6	$9,053.5	$9,351.3	-$402.1	$8,949.2	$9,389.7	$440.5
Regional Counsel Salaries & Expenses		$3,568.9	$3,745.7	$3,772.2	-$162.2	$3,610.0	$3,827.0	$217.0
	TOTAL	$3,568.9	$3,745.7	$3,772.2	-$162.2	$3,610.0	$3,827.0	$217.0

REGIONAL MANAGEMENT

Regional Management

(DOLLARS IN THOUSANDS)

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Planning, Evaluation & Analysis - Regions								
Salaries & Expenses		$2,358.5	$2,640.2	$2,525.6	-$108.6	$2,417.0	$2,432.1	$15.1
	TOTAL	$2,358.5	$2,640.2	$2,525.6	-$108.6	$2,417.0	$2,432.1	$15.1
TOTAL:								
Salaries & Expenses		$28,774.0	$28,534.7	$28,817.0	-$1,239.1	$27,577.9	$28,397.0	$819.1
Regional Management	TOTAL	$28,774.0	$28,534.7	$28,817.0	-$1,239.1	$27,577.9	$28,397.0	$819.1
PERMANENT WORKYEARS								
Resource Management - Regions		36.5	38.1	38.8		38.8	37.8	-1.0
Financial Management - Regions		87.3	84.1	83.4		83.4	81.6	-1.8
Personnel Management - Regions		96.0	84.2	85.0		85.0	83.2	-1.8
Administrative Management - Regions		158.0	151.6	152.9		152.9	149.6	-3.3
Regional Management		182.7	179.8	173.2		173.2	172.9	-.3
Regional Counsel		72.8	72.8	73.4		73.4	73.4	
Planning, Evaluation & Analysis - Regions		54.0	57.6	54.8		54.8	54.0	-.8
TOTAL PERMANENT WORKYEARS		687.3	668.2	661.5		661.5	652.5	-9.0

REGIONAL MANAGEMENT

Regional Management

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
TOTAL WORKYEARS							
Resource Management - Regions	40.7	42.5	42.5		42.5	41.5	-1.0
Financial Management - Regions	99.0	92.6	92.6		92.6	90.8	-1.8
Personnel Management - Regions	110.3	95.9	95.9		95.9	94.1	-1.8
Administrative Management - Regions	184.4	170.9	170.9		170.9	167.6	-3.3
Regional Management	220.4	198.2	194.9		194.9	194.5	-.4
Regional Counsel	78.9	80.2	80.2		80.2	80.2	
Planning, Evaluation & Analysis - Regions	59.8	61.1	61.1		61.1	60.1	-1.0
TOTAL WORKYEARS	793.5	741.4	738.1		738.1	728.8	-9.3

MANAGEMENT AND SUPPORT

Regional Management

Budget Request

The Agency requests a total of $28,397,000 supported by 728.8 total workyears for 1987, an increase of $819,100 and a decrease of 9.3 total workyears from 1986. All of the request is for the Salaries and Expenses appropriation.

Program Description

This program contains the following program elements:

Resource Management - Regions -- This component provides resources to develop Regional budgets and operating plans, participate in the workload analysis process, manage current year resources, and enhance resource management and control in the Regions.

Financial Management - Regions -- This component provides financial accounting and reporting services for the Regional offices.

Personnel Management - Regions -- This component provides basic personnel services, including staffing, classification, and training to the Regional offices.

Administrative Management - Regions -- This component includes mini-computer systems management, library support, safety, security, printing and copying, facilities management, small purchases, and other administrative functions.

Regional Management -- This component includes the Regional Administrators and their immediate staffs, as well as the basic staff functions of Civil Rights.

Regional Counsel -- This component includes the Offices of Regional Counsel which assist the Regional Administrators in ensuring that their decisions are legally defensible and consistent with national legal interpretations. They represent the Regional office in defensive litigation activities; review Regional rulemakings; assist States in obtaining delegation of programs; and support the Regional enforcement litigation program.

Planning, Evaluation, and Analysis - Regions -- This component includes resources that provide analytical support to the Regional Administrators to assure the efficient and effective operation of EPA Regions. Activities include planning, accountability reporting, program evaluation, economic analysis, management, and Regional participation in EPA's regulatory process.

RESOURCE MANAGEMENT - REGIONS

1987 Program Request

The Agency requests a total of $1,547,200 supported by 41.5 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents a decrease of $21,000 and 1.0 total workyear from 1986. The decrease in resources results from the increased use of office automation. This level of funding supports Regional resource management and control activities including budget and operating plan development and workload analysis. In addition, these resources will allow the Regional offices to continue implementing the Federal Managers' Financial Integrity Act and further strengthen funds control.

1986 Program

In 1986, the Agency is allocating a total of $1,568,200 supported by 42.5 total workyears, all of which is from the Salaries and Expenses appropriation. These resources are being used to conduct budgeting and resource analysis functions in the ten Regional offices.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,396,200 supported by 40.7 total workyears, all of which was from the Salaries and Expenses appropriation. These resources allowed Regional Administrators to effectively and efficiently manage their resources and operating plan processes.

FINANCIAL MANAGEMENT - REGIONS

1987 Program Request

The Agency requests a total of $2,693,400 supported by 90.8 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $40,900 and a decrease of 1.8 total workyears from 1986. The decrease in total workyears reflects improved productivity resulting from the emphasis on automation of basic finance functions including the automation of various payroll activities and implementation of the Treasury's letter of credit payment system. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. This level of funding will allow the Financial Management Offices to provide basic financial services and maintain ongoing financial management functions. The Financial Management Offices will continue to provide accounting, payment processing, billings and collections for grants, travel, payroll, contracts, purchase orders, and all other financial transactions, as well as payroll support and general ledger activities.

1986 Program

In 1986, the Agency is allocating a total of $2,652,500 supported by 92.6 total workyears, all of which is from the Salaries and Expenses appropriation. These resources are being used to provide the Regions with accounting, payment processing, payroll support, financial reporting services, and comprehensive financial management.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,733,700 supported by 99.0 total workyears, all of which was from the Salaries and Expenses appropriation. With these resources, the Financial Management Offices provided a full range of financial management services including the implementation of the Diners Club Program, automated payroll data entry system, and Treasury's letter of credit payment system.

PERSONNEL MANAGEMENT - REGIONS

1987 Program Request

The Agency requests a total of $3,015,100 supported by 94.1 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $1,600 and a decrease of 1.8 total workyears from 1986. The decrease in resources reflects an anticipated reduced rate of hiring during 1987. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. The resources provided will allow Regional Personnel Offices to meet basic regulatory requirements and maintain current service levels. These services include processing recruitment and classification actions, entering data and updates to the Agency's payroll system, providing advisory services and reorganization reviews, administering the grievance system, negotiation with unions, and managing the Performance Management and Recognition System.

1986 Program

In 1986, the Agency is allocating a total of $3,013,500 supported by 95.9 total workyears, all of which is from the Salaries and Expenses appropriation. These resources are being used to process recruitment, staffing and classification actions, perform position management and pay administration, process personnel and payroll transactions, administer grievance system and disciplinary action procedures, provide employment development and training, consult and negotiate with local unions, conduct special studies, and advise Regional managers on the above functions.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,293,100 supported by 110.3 total workyears, all of which was from the Salaries and Expenses appropriation. With these resources, the Regional Personnel Offices provided ongoing personnel services to support the accomplishment of the Regions' program operations and goals, with emphasis on staffing needs for the Hazardous Waste program, better training programs for Regional employees, and initiation of human resources management programs.

ADMINISTRATIVE MANAGEMENT - REGIONS

1987 Program Request

The Agency requests a total of $5,492,500 supported by 167.6 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $125,000 and a decrease of 3.3 total workyears from 1986. The decrease in total workyears reflects cost savings from productivity improvements and the use of contractors for support services. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. These resources will allow the Regions to provide administrative management services that include maintaining administrative information systems and minicomputer operations, ensuring effective ADP operations support for Regional programs, managing word processing equipment and ADP systems acquisition, maintaining Regional library operations, coordinating Regional records management, directing contracting and purchasing activities, ensuring the safety and security of Regional personnel, managing property and supplies, providing general office services and providing program management for all support services.

1986 Program

In 1986, the Agency is allocating a total of $5,367,500 supported by 170.9 total workyears, all of which is from the Salaries and Expenses appropriation. These resources are being used to provide the Regions with administrative management activities in the areas of information management, small purchases and procurements, health and safety, and facilities support.

1985 Accomplishments

In 1985, the Agency obligated a total of $5,713,000 supported by 184.4 total workyears, all of which was from the Salaries and Expenses appropriation. With these resources, the Regions provided a full complement of administrative management services including strengthened contracts management. In addition, they began implementation of information management plans, including the increased use of personal computers, and integrated electronic telecommunications lines to achieve cost savings and productivity gains.

REGIONAL MANAGEMENT

1987 Program Request

The Agency requests a total of $9,389,700 supported by 194.5 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $440,500 and a decrease of 0.4 in total workyears from 1986. The decrease in total workyears results from a reduction in administrative personnel. The dollar increase will facilitate improved environmental policy coordination between the Regions and the States. The budget request will enable the Regional offices to continue to shape and articulate policy for State and local governments; respond to inquiries from Congress, the news media and the public; establish regular communications with public interest, environmental and business groups; and maintain Equal Employment Opportunity and Freedom of Information programs.

1986 Program

In 1986, the Agency is allocating a total of $8,949,200 supported by 194.9 total workyears, all of which is from the Salaries and Expenses appropriation. Basic press services and media relations activities are being maintained as well as policy guidance and executive direction for the Region as a whole. The program will continue the processing of Freedom of Information (FOI) requests, issuing critical news releases, maintaining a regional Equal Employment Opportunity program, responding to Congressional inquiries, and coordinating EPA involvement in major State environmental issues.

1985 Accomplishments

In 1985, the Agency obligated a total of $9,710,600 supported by 220.4 total workyears, all of which was from the Salaries and Expenses appropriation. This program provided support for the Regional Administrators and their immediate staffs, as well as for the basic staff functions of public affairs, Congressional and intergovernmental activities, and the equal employment opportunity function.

REGIONAL COUNSEL

1987 Program Request

The Agency requests a total of $3,827,000 supported by 80.2 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $217,000 and no change in total workyears from 1986. The increase provides for additional personnel and support costs.

The Offices of Regional Counsel will continue to handle all defensive litigation involving principally Regional issues. They will provide advice and counsel to Regional programs; review Regional rulemaking actions; assist States by reviewing State program delegations and advising State agencies on obtaining adequate legal authorities; and support Agency contract and assistance programs through resolution of grant appeals, bid protests, and debarment and suspension actions. Special emphasis will be placed on providing legal support to the reauthorized Resource Conservation and Recovery Act.

1986 Program

In 1986, the Agency is allocating a total of $3,610,000 supported by 80.2 total workyears, all of which is from the Salaries and Expenses appropriation. The Offices of Regional Counsel handle all defensive litigation involving principally Regional issues . They provide advice and counsel to Regional programs; review Regional rulemaking actions; and assist States by reviewing State program delegations and advising State agencies on obtaining adequate legal authorities. Additionally, the Regional Counsels continue to support Agency contract and assistance programs through resolution of grant appeals, bid protests, and debarment suspension actions.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,568,900 supported by 78.9 total workyears, all of which was from the Salaries and Expenses appropriation. In 1985, the Regional Counsels supported Agency priorities by providing legal advice and support to Regional managers and defending the Agency in all litigation filed against it. They also advised on actions such as grants, contracts, and personnel actions. Additionally, Regional Counsel activities included advising State agencies on the legal requirements for assuming environmental protection programs, assisting in drafting appropriate regulatory language, and helping negotiate and document the terms of delegation agreements.

PLANNING, EVALUATION, AND ANALYSIS - REGIONS

1987 Program Request

The Agency requests a total of $2,432,100 supported by 60.1 total workyears, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $15,100 and a decrease of 1.0 total workyear from 1986. The workyear decrease results from less emphasis on Regional economic analysis. The dollar increase reflects adjustments to the 1986 base as part of government-wide deficit reductions.

This funding will provide the Regional Administrators with the planning, evaluation and analysis support needed to successfully manage the Regional offices. Support will include directing Regional resources to carry out specific management objectives identified in the Strategic Planning and Management System. Managing for environmental results will entail evaluating Regional, State, and local efforts to manage groundwater contamination problems and surveying alternatives to land disposal of hazardous waste. The Regional offices also will provide inter-media perspectives on cross-cutting issues, such as review and evaluation of inter-media non-point source programs and development of a strategy for dealing with those problems. In addition, they will continue to shift Regional programs from an implementation to an oversight role and integrate data which provides the basis for environmental decision-making and cost-effective use of resources, as evidenced in the State Pilot Projects for Improved Environmental Decision Making.

1986 Program

In 1986, the Agency is allocating a total of $2,417,000 supported by 61.1 total workyears, all of which is from the Salaries and Expenses appropriation. With these resources, the Regions are focusing on automating a priority regulations system governing participation in Agency rulemaking and reviews of proposed significant policy documents; coordinating and evaluating the implementation of the Agency's Performance-Based Grants Policy; developing performancebased grants and integrating them into comprehensive mid-year evaluations of state program performance; and providing support to the Air, Water, and Resource Conservation and Recovery Act programs to develop and implement integrated strategies to streamline Regional efforts and achieve environmental results. They also are participating with other Agency offices in the State Pilot Projects for Improved Environmental Decision-Making currently underway in Oregon, Kansas, Kentucky, New Jersey, and Maryland.

1985 Accomplishments

In 1985, the Agency obligated a total of $2,358,500 supported by 59.8 total workyears, all of which was from the Salaries and Expenses appropriation, to conduct the planning, evaluation, and analysis functions in the ten Regional offices. The Regions concentrated on managing for environmental results, improving the annual planning process and utilizing environmental objectives in the planning process, refining accountability systems, analyzing weaknesses in the Agency's monitoring programs, improving monitoring data, developing monitoring strategies, implementing the Delegation and Oversight Policy for State Programs, and regulatory reform.

ENVIRONMENTAL PROTECTION AGENCY

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SUPPORT COSTS

Support Costs

(DOLLARS IN THOUSANDS)

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
Professional Training								
Salaries & Expenses		$440.5	$497.4	$500.0	-$21.5	$478.5	$520.4	$41.9
	TOTAL	$440.5	$497.4	$500.0	-$21.5	$478.5	$520.4	$41.9
Nationwide Support Services								
Salaries & Expenses		$51,328.9	$55,036.4	$56,111.4	-$2,414.5	$53,696.9	$57,957.7	$4,260.8
Operations, Research and Facilities		$51.9						
	TOTAL	$51,380.8	$55,036.4	$56,111.4	-$2,414.5	$53,696.9	$57,957.7	$4,260.8
Headquarters Support Services								
Salaries & Expenses		$32,183.3	$32,585.6	$32,529.5	-$1,398.8	$31,130.7	$34,660.1	$3,529.4
	TOTAL	$32,183.3	$32,585.6	$32,529.5	-$1,398.8	$31,130.7	$34,660.1	$3,529.4
Regional Support Services								
Salaries & Expenses		$24,171.5	$21,508.4	$22,981.5	-$988.1	$21,993.4	$23,678.5	$1,685.1
	TOTAL	$24,171.5	$21,508.4	$22,981.5	-$988.1	$21,993.4	$23,678.5	$1,685.1
Automated Data Processing and Telecommunications Support Costs								
Salaries & Expenses		$26,362.7	$23,700.0	$23,686.2	-$1,018.6	$22,667.6	$26,552.9	$3,885.3
	TOTAL	$26,362.7	$23,700.0	$23,686.2	-$1,018.6	$22,667.6	$26,552.9	$3,885.3
Lab Support-Research & Development								
Salaries & Expenses		$5,596.2	$4,631.8	$5,852.6	-$251.6	$5,601.0	$5,852.6	$251.6
	TOTAL	$5,596.2	$4,631.8	$5,852.6	-$251.6	$5,601.0	$5,852.6	$251.6

SUPPORT COSTS

Support Costs

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
Lab Support - Air And Radiation								
Salaries & Expenses		$1,825.1	$1,753.2	$1,753.2	-$75.3	$1,677.9	$1,753.2	$75.3
	TOTAL	$1,825.1	$1,753.2	$1,753.2	-$75.3	$1,677.9	$1,753.2	$75.3
Lab Support - Pesticides & Toxic Substances								
Salaries & Expenses		$244.6	$251.4	$251.4	-$10.8	$240.6	$251.4	$10.8
	TOTAL	$244.6	$251.4	$251.4	-$10.8	$240.6	$251.4	$10.8
TOTAL:								
Salaries & Expenses		$142,152.8	$139,964.2	$143,665.8	-$6,179.2	$137,486.6	$151,226.8	$13,740.2
Operations, Research and Facilities		$51.9						
Support Costs	TOTAL	$142,204.7	$139,964.2	$143,665.8	-$6,179.2	$137,486.6	$151,226.8	$13,740.2

MANAGEMENT AND SUPPORT

Support Costs

Budget Request

The Agency requests a total of $151,226,800 for 1987, an increase of $13,740,200 from 1986. All of the request is for the Salaries and Expenses appropriation.

Program Description

The Agency Support Service components provide funds for general support to all Agency programs except Superfund. Programs under support services are:

Professional Training -- This component provides Agencywide training to executive, supervisory, secretarial, clerical, scientific and technical employees.

Nationwide Support Services -- This component provides Agencywide services for the following support functions: facilities rental and associated costs; payments to the U.S. Postal Service; Federal Telecommunications Service (FTS); nationwide security services; reimbursements to the Federal Employees' Compensation Fund; payments to the Public Health Service for personnel and administrative services for commissioned officers assigned to EPA; and contracts and Intergovernmental Agreements which support EPA's occupational health and safety program, and the finance and payroll systems.

Headquarters Support Services -- This program provides office, building, and information management services to Headquarters and the research center at Research Triangle Park (RTP), North Carolina and Cincinnati, Ohio.

Regional Support Services -- This component provides office, building, and information management services for Regional offices.

Automated Data Processing and Telecommunications Support Costs -- This component provides computing and related data processing services to all Agency programs.

Lab Support - Research and Development -- This component provides support services to the Office of Research and Development's seven remote laboratories (those located outside Cincinnati, and Research Triangle Park). These costs are not covered by the Headquarters Support account, which funds similar items in Headquarters, Cincinnati, and RTP.

Lab Support - Air and Radiation -- This component provides support services to the Motor Vehicle Emissions Laboratory, the Eastern Environmental Radiation Facility, and the Las Vegas facility.

Lab Support - Pesticides and Toxic Substances -- This component provides support services to laboratories in Beltsville, Maryland and Bay St. Louis, Mississippi.

PROFESSIONAL TRAINING

1987 Program Request

The Agency requests a total of $520,400, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $41,900 from 1986. This increase will cover escalated costs for services. This request will maintain current training and development programs mandated by statute and the Office of

Personnel Management (OPM). This program also supports a variety of activities to provide a career development framework for employees. Training programs will be provided to enhance the Agency's scientific and technical expertise, management effectiveness, and clerical support.

1986 Program

In 1986, the Agency is allocating a total of $478,500, all of which is from the Salaries and Expenses appropriation. These funds are being used to assess training and career development needs and programs, to provide training for Agency employees, and to develop new training and development mechanisms.

1985 Accomplishments

In 1985, the Agency obligated a total of $440,500, all of which was from the Salaries and Expenses appropriation. These funds were utilized to provide training in the areas of supervisory management, executive development, clerical skills, and technical and scientific development.

NATIONWIDE SUPPORT SERVICES

1987 Program Request

The Agency requests a total of $57,957,700, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $4,260,800 from 1986. The increase will cover space rental rate increases as well as cost escalations to service contracts. These funds will pay for Agencywide support costs including space rental, postage, FTS and telecommunications costs, national security, Code of Federal Regulations typesetting, unemployment compensation, workmen's compensation, health and safety studies, and personnel support for Public Health Service commissioned officers.

1986 Program

In 1986, the Agency is allocating a total of $53,696,900, all of which is from the Salaries and Expenses appropriation. These resources are being used by the Agency to provide efficient nationwide services to the Agency workforce.

1985 Accomplishments

In 1985, the Agency obligated a total of $51,380,800, of which $51,328,900 was from the Salaries and Expenses appropriation and $51,900 was from the Operations, Research, and Facilities appropriation. These resources allowed the Agency to launch several Nationwide Support efforts in the areas of space planning, telecommunications, information security, and personal property management. These resources also assisted Regional offices in relocating from abestos contaminated environments.

HEADQUARTERS SUPPORT SERVICES

1987 Program Request

The Agency requests a total of $34,660,100, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $3,529,400 from 1986. The increase will cover cost escalations to service contracts, as well as rate increases in a number of support areas (e.g., telephones, utilities, etc.). These resources will provide ongoing Headquarters Support services including motor pool, printing and copying, telephones, utilities, facilities operations and maintenance, mail distribution, and ADP technical support to EPA operations in Washington, Research Triangle Park (RTP), North Carolina, and Cincinnati, Ohio.

1986 Program

In 1986, the Agency is allocating a total of $31,130,700, all of which is from the Salaries and Expenses appropriation. These resources are being used to provide ongoing office, building, and information management services to EPA operations in Washington, RTP, and Cincinnati. With this funding level the Agency is continuing to operate and manage EPA facilities, provide office supply/support services, and develop, operate and enhance management information systems. Additionally, the Agency is developing operating plans for new delegations of authority for lease enforcement/building operations at Headquarters facilities, and refining procedures for property management/inventory control.

1985 Accomplishments

In 1985, the Agency obligated a total of $32,183,300, all of which was from the Salaries and Expenses appropriation. These resources provided basic Headquarters Support services to EPA operations in Washington, RTP, and Cincinnati. In addition, these resources supported the preparation of additional office space in the North East Mall, and continued implementation of electronic security systems.

REGIONAL SUPPORT SERVICES

1987 Program Request

The Agency requests a total of $23,678,500, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $1,685,100 from 1986 to allow for increased operating costs. This level of resources will provide the ten Regional offices with basic support services including printing and copying, minicomputer operations, utilities, mail, telephone, library operations, general training, and office and laboratory facility maintenance. These funds will also help to meet the demand for technical and laboratory support.

1986 Program

In 1986, the Agency is allocating a total of $21,993,400, all of which is from the Salaries and Expenses appropriation. These resources are being used to provide effective and efficient office, building, and information management services to the Regions.

1985 Accomplishments

In 1985, the Agency obligated a total of $24,171,500, all of which was from the Salaries and Expenses appropriation. These funds provided ongoing support services in the Regions, including improved property management and better safety and security for EPA employees. Also, the Regions continued efforts to contract out appropriate support services, provided minicomputer operations to increase Regional productivity, and in some Regions achieved significant gains through space consolidation.

AUTOMATED DATA PROCESSING AND TELECOMMUNICATIONS SUPPORT COSTS

1987 Program Request

The Agency requests a total of $26,552,900, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $3,885,300 from 1986. This increase will enable the Agency to continue its program to replace obsolete computers in its ten Regional offices as well as cover increased costs for computing services. With this level of resources we will maintain current computing services in support of all Agency programs, exclusive of Superfund. These funds will be used to acquire, maintain and operate computing hardware and systems software at the Agency's National Computer Center; provide central management and technical support of the Agency's distributed computing resources; and operate a telecommunications network linking these central and distributed computing systems.

1986 Program

The Agency is allocating a total of $22,667,600, all of which is from the Salaries and Expenses appropriation. These funds are being used to maintain current computing services in support of all Agency programs, exclusive of Superfund. These services include acquiring, maintaining, and operating computing hardware and systems software at the Agency's National Computer Center; central management and technical support of the Agency's distributed computing resources; and operating a data communications network linking these central and distributed computing systems.

1985 Accomplishments

In 1985, the Agency obligated a total of $26,362,700, all of which was from the Salaries and Expenses appropriation. The Agency used these funds to complete the modernization of its mainframe computing systems, install more efficient telecommunications services to the EPA Regions and major laboratory centers, and begin replacing obsolete computing systems in the EPA Regional offices.

LAB SUPPORT - RESEARCH AND DEVELOPMENT

1987 Program Request

The Agency requests a total of $5,852,600, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $251,600 from 1986. The increase reflects increased operating expenses. Funds provide for essential services required to operate and maintain ORD's seven remote laboratories located in Athens, Georgia; Ada, Oklahoma; Corvallis, Oregon; Duluth, Minnesota; Narragansett, Rhode Island; Gulf Breeze, Florida; and Las Vegas, Nevada. Services include, but are not limited to, facilities operation and maintenance, janitorial and guard services, local telephone services, utilities, and equipment operations, maintenance, and rental costs.

1986 Program

In 1986, the Agency is allocating a total of $5,601,000, all of which is from the Salaries and Expenses appropriation. This program provides funds for the operation and maintenance of ORD's seven remote laboratories.

1985 Accomplishments

The Agency obligated a total of $5,596,200, all of which was from the Salaries and Expenses appropriation. Funds provided for the operation and maintenance of remote laboratories.

LAB SUPPORT - AIR AND RADIATION

1987 Program Request

The Agency requests a total of $1,753,200, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $75,300 from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. This program will support the Motor Vehicle Emissions Laboratory (MVEL) in Ann Arbor, Michigan; the Eastern Environmental Radiation Facility (EERF) in Montgomery, Alabama; and the Las Vegas radiation facility in Nevada. These funds provide basic operation and maintenance support at these locations. Support provided consists of security, janitorial and maintenance services, utilities, GSA vehicles, supplies and materials, and communications.

1986 Program

In 1986, the Agency is allocating $1,677,900, all of which is from the Salaries and Expenses appropriation. The 1986 program is providing the same types of activities described for 1987: basic laboratory operations, maintenance and supplies. These activities are required on a continuing basis.

1985 Accomplishments

In 1985, the Agency obligated a total $1,825,100, all of which was from the Salaries and Expenses appropriation. These funds provided the basic facilities operations and maintenance costs necessary to operate the three laboratories.

LAB SUPPORT - PESTICIDES AND TOXIC SUBSTANCES

1987 Program Request

The Agency requests a total of $251,400, all of which will be for the Salaries and Expenses Appropriation. This represents an increase of $10,800 from 1986. The increase reflects adjustments to the 1986 base as part of government-wide deficit reductions. These funds will be used for basic facilities and operations and maintenance costs for the laboratories in Beltsville, Maryland and Bay St. Louis, Mississippi. These costs include utilities, security, communications, warehousing, custodial services, and building maintenance.

1986 Program

In 1986, the Agency is allocating a total of $240,600 all of which is from the Salaries and Expenses appropriation. The 1985 program supports the facilities, operations, and maintenance costs of the Office of Pesticides and Toxic Substances' laboratories.

1985 Accomplishments

In 1985, the Agency obligated a total of $244,600, all of which was from the Salaries and Expenses appropriation. The funds were used to obtain the continued requirements for general support and maintenance.

ENVIRONMENTAL PROTECTION AGENCY

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BUILDINGS AND FACILITIES

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Buildings and Facilities	$5,228.1	$5,000.0	$5,000.0	-$215.0	$4,785.0	$5,000.0	$215.0
TOTAL, Buildings and Facilities	$5,228.1	$5,000.0	$5,000.0	-$215.0	$4,785.0	$5,000.0	$215.0
OUTLAYS	$3,872.3	$5,195.0	$5,449.5	-$55.0	$5,394.5	$8,405.5	$3,011.0
AUTHORIZATION LEVELS	Authorization is by virtue of the Appropriation Act.						

BUILDINGS AND FACILITIES

OVERVIEW AND STRATEGY

The Buildings and Facilities appropriation funds the design, construction, repair and improvement of buildings occupied by EPA. The Agency currently has ten Regional offices, three large research and development laboratories, several field stations with laboratory facilities and a large Headquarters complex.

This program provides a safe and healthful work environment for EPA employees by providing for maintenance, repair or replacement of our facilities. Major efforts are directed towards implementing intermediate and long-range plans which assess alternative housing options for EPA operations, as well as continuing a repair program that protects the investment in EPA's real property holdings. Resources are also used to upgrade and modify current facilities to more adequately and efficently address Agency programs. Particular emphasis will continue to be placed on modifying current facilities in order to respond to the high level of activity in the hazardous waste program.

BUILDINGS AND FACILITIES

Building and Facilities

PROGRAM		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
New Facilities								
Buildings & Facilities		$1,634.4						
	TOTAL	$1,634.4						
Repairs & Improvements								
Buildings & Facilities		$3,593.7	$5,000.0	$5,000.0	-$215.0	$4,785.0	$5,000.0	$215.0
	TOTAL	$3,593.7	$5,000.0	$5,000.0	-$215.0	$4,785.0	$5,000.0	$215.0
TOTAL:								
Buildings & Facilities		$5,228.1	$5,000.0	$5,000.0	-$215.0	$4,785.0	$5,000.0	$215.0
Building & Facilities	TOTAL	$5,228.1	$5,000.0	$5,000.0	-$215.0	$4,785.0	$5,000.0	$215.0

BUILDINGS AND FACILITIES

Budget Request

The Agency requests a total of $5,000,000 all of which will be for the Buildings and Facilities appropriation. This represents an increase of $215,000 from 1986.

Program Description

This program funds the design and construction of new EPA facilities, as well as necessary repairs and improvements to buildings already occupied by EPA. The Agency is currently upgrading its facilities by improving heating and ventilating systems, enlarging hazardous waste containment areas, improving fire detection systems, providing interior and exterior facility repairs, upgrading electrical systems, performing engineering and planning studies, and making emergency repairs. In addition, the Agency is currently designing a new radiation laboratory in Montgomery, Alabama, with construction planned for 1987.

This program contains the following two elements:

New Facilities -- This includes engineering and design services and building costs for the construction of new Federally owned facilities to be occupied by EPA and existing Federally owned and EPA occupied facilities.

Repairs and Improvements -- This covers major repairs and capital improvements to any buildings or facilities occupied by EPA. Most of the projects relate to the correction of health and safety deficiencies, the prevention of serious deterioration, and the modification of current facilities to meet program requirements.

NEW FACILITIES

1987 Program Request

The Agency is not requesting any funds for this activity in 1987.

1986 Program

In 1986, the Agency is not allocating new funds for this activity. However, we are continuing our efforts to design a new radiation laboratory in Montgomery, Alabama, design a full containment facility in Cincinnati, Ohio, construct a wildlife toxicology facility in Corvallis, Oregon, and construct a pollution abatement facility at the Environmental Research Laboratory in Narragansett, Rhode Island. Also, we are continuing plans and designs for a replacement laboratory in Newport, Oregon.

1985 Accomplishments

In 1985, the Agency obligated a total of $1,634,400 for this program, all of which was from the Buildings and Facilities appropriation. These funds were used to begin constructing a wildlife toxicology facility for the Environmental Research Laboratory at Corvallis, Oregon, and a pollution abatement facility at the Environmental Research Laboratory in Narragansett, Rhode Island. The Agency also initiated the design of a full containment facility in Cincinnati, Ohio, and a new radiation laboratory in Montgomery, Alabama.

REPAIRS AND IMPROVEMENTS

1987 Program Request

The Agency requests a total of $5,000,000 for this program, all of which will be for the Buildings and Facilities appropriation. This represents an increase of $215,000 from 1986. The increase will provide for increased costs for repairs and improvements in 1987. These funds will provide planning, engineering design, and construction related to the repair and improvement of buildings occupied by EPA. More specifically, these funds will be used to address critical repairs related to employee health and safety (fire protection installation); environmental compliance efforts in EPA facilities (asbestos removal and hazardous materials storage); and required alterations and repairs (electrical distribution, air conditioning, emergency power for animal facilities).

1986 Program

In 1986, the Agency is allocating a total of $4,785,000 for this program, all of which is from the Buildings and Facilities appropriation. These resources are being utilized primarily to provide facilities maintenance and repair in an effort to prevent further deterioration of EPA facilities; to initiate environmental compliance activities such as asbestos and PCB removal; and to continue health and safety improvements and modifications to facilities reflecting shifts in program priorities and expanded space requirements.

1985 Accomplishments

In 1985, the Agency obligated a total of $3,593,700, all of which was from the Buildings and Facilities appropriation. These resources were used to complete various health and safety improvements to protect EPA employees and provide routine and emergency repairs at multiple sites throughout the nation.

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CONSTRUCTION GRANTS

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
Appropriation	$2,400,000.0	$2,400,000.0	$600,000.0*	-$25,800.0	$574,200.0*	0**	-$574,200.0
Obligations	$2,573,964.9	$2,500,000.0	$1,400,000.0	-$25,800.0	$1,374,200.0	$108,267.0	-$1,265,933.0
Outlays	$2,899,742.7	$2,650,000.0	$2,820,000.0	-$258.0	$2,819,742.0	$2,355,200.0	-$464,542.0
Authorization Levels	$2,600,000.0***	Authorization for Construction Grants expired September 30,1985, and is pending reauthorization.					

* An additional $1.8 billion has been appropriated pending reauthorization.
** A Supplemental Appropriation request for $1.8 billion will be proposed subsequent to reauthorization.
*** Authorization level includes $200.0 million for Combined Sewer Overflow program.

CONSTRUCTION GRANTS

OVERVIEW AND STRATEGY

The Federal government has provided in excess of $40 billion in grants for construction of wastewater treatment plants. The Administration has proposed to phase out the Federal grant program by 1990 and return responsibility for meeting future wastewater treatment construction needs to State and local governments. This transition of responsibilty was initiated in 1977 and expanded in 1981 with amendments to the Clean Water Act (CWA) that encouraged delegation of the program to States and reduced Federal grant eligibilities.

Implementing the current CWA and the Administration's proposed legislation, the goals of the Construction Grants program continue to be to improve water quality and protect health, to reduce the discharge of municipal wastewater pollutants, and to ensure an effective transition of program management and financial responsibility from the Federal Government to State and local governments. To meet these goals, the program provides grants to municipal and intermunicipal agencies to assist in financing the construction of cost-effective and environmentally sound municipal wastewater treatment facilities to comply with requirements of the Clean Water Act. In addition the program provides funds to help delegated States manage the Construction Grants program and carry out water quality management planning programs. EPA works with the States to ensure that funds go to projects with the greatest water quality and public health impact. As of the end of 1985, 4319 projects remained active.

During 1985, EPA proposed legislative amendments addressing issues of the Federal role under a transitional program including Federal policy, management, oversight, and assistance to State programs. These legislative amendments propose Federal funding totalling $6,000,000,000 through 1989 and, beginning in 1986, funding be limited to ongoing projects that had previously received Federal funds.

To assist the transition of responsibility, EPA is providing essential guidance to implement statutory and Agency requirements; providing training and technical assistance to State and EPA personnel to develop needed skills; helping maintain facilities compliance; and continuing to maintain essential oversight of State construction and operations and maintenance programs.

CONSTRUCTION GRANTS

Construction Grants

Budget Request

The Agency is not requesting funds for 1987 at this time. Subject to enactment of appropriate reform legislation, the Agency will submit an amended request for $1,800,000,000 for the Municipal Construction Grants program. This request will represent an increase of $1,225,800,000 over the $574,200,000 currently available from 1986 appropriations.

Program Description

This program provides grants to municipal and intermunicipal agencies to assist in financing the construction of cost-effective and environmentally sound municipal wastewater treatment facilities and to assist delegated States in carrying out their responsibilities. Resources associated with the management of Construction Grants are described in the Municipal Source Control subactivity.

Statutory set-aside provisions of the Act have authorized States to reserve up to four percent of their authorization or $400,000, whichever is greater, primarily to manage delegated activities. Clean Water Act Amendments proposed by EPA in 1985 would eliminate State set-asides for water quality management planning, Innovative/Alternative technologies and rural communities. All grants for assisting in the construction of wastewater treatment facilities are to be awarded on the basis of a State's priority system, which is designed to ensure that funds are awarded to projects with the greatest potential for improving water quality.

The 1981 Amendments to the Clean Water Act increased non-Federal responsibility for financing construction from 25% to 45% for awards made beginning in 1985 while maintaining the share for already started phased or segmented projects at 25 percent. Grantees must demonstrate prior to award that the most economical alternative has been selected, including construction, operation, maintenance, and replacement costs. Value engineering review became mandatory for projects above $10 million. Additionally, engineering firms must oversee a project's first year of operation to help ensure that it meets design and permit specifications. Other provisions designed to make projects more cost effective included eliminating funding to construct reserve capacity, limiting project eligibilities beginning in 1985, and providing for State discretion on certain funding eligibilities. EPA is working with all States to continue ensuring optimum delegation and effective State oversight.

CONSTRUCTION GRANTS

1987 Program Request

No 1987 budget request is made at this time. However, once appropriate reform legislation is enacted, the Agency will submit an amended request totaling $1,800,000,000. This represents an increase of $1,225,800,000 over the $574,200,000 currently available from the 1986 Continuing Resolution. Consistent with the need to honor previous funding commitments, the Administration continues to support passage of legislation to limit funding to ongoing projects that have already received Federal funding, i.e., no new starts.

1986 Program

The Agency is allocating a total of $574,200,000 from the 1986 Continuing Resolution to fund both new projects and phased or segmented projects. Congress has also reserved $1,800,000 to be made available in a future appropriations bill. The Agency estimates gross obligations of $1,880,000 000, predominantly from previous years' authority, and net outlays of approximately $2 820,000,000. A total of 148 step 3 and step 2 and 3 grant awards are being made resulting in 2,849 active construction projects at the end of 1986.

1985 Accomplishments

In 1985, net construction grants obligations totaled $2,105,000,000, and supported 476 Step 3 and 2+3 grant awards. This funding resulted in 4319 active projects at the end of 1985. During the year, construction was completed on 833 projects. Federal outlays totaled $2,899,742,700.

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SUPERFUND

	ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE DECREASE - 1987 VS 1986
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Hazardous Substances Response Trust Fund	$480,405.2	$900,000.0	$900,000.0	-$38,700.0	$861,300.0	$1,050,000.0	$188,700.0
TOTAL, Superfund	$480,405.2	$900,000.0	$900,000.0	-$38,700.0	$861,300.0	$1,050,000.0	$188,700.0
PERMANENT WORKYEARS	1,237.2	1,556.2	1,556.2		1,556.2	1,556.2	
TOTAL WORKYEARS	1,350.3	1,716.0	1,716.0		1,716.0	1,716.0	
OUTLAYS	$360,311.6	$670,000.0	$480,000.0	-$7,590.0	$472,410.0	$770,800.0	$298,390.0
AUTHORIZATION LEVELS	Taxing authority, which is the major source of funding for this program expired on September 30, 1985. Funding for both 1986 and 1987 is contingent on reauthorization.						

SUPERFUND

Hazardous Substance Response Trust Fund

		ACTUAL 1985	BUDGET ESTIMATE 1986	ENACTED 1986	BALANCED BUDGET REDUCTION	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 VS 1986
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Hazardous Substance Response Trust Fund								
Hazardous Substances		$480,405.0	$900,000.0	$900,000.0	-$38,700.0	$861,300.0	$1050,000.0	$188,700.0
	TOTAL	$480,405.0	$900,000.0	$900,000.0	-$38,700.0	$861,300.0	$1050,000.0	$188,700.0
TOTAL:								
Hazardous Substances		$480,405.0	$900,000.0	$900,000.0	-$38,700.0	$861,300.0	$1050,000.0	$188,700.0
Hazardous Substance Response Trust Fund	TOTAL	$480,405.0	$900,000.0	$900,000.0	-$38,700.0	$861,300.0	$1050,000.0	$188,700.0
PERMANENT WORKYEARS								
Hazardous Substance Response Trust Fund		1,237.2	1,556.2	1,556.2		1,556.2	1,556.2	
TOTAL PERMANENT WORKYEARS		1,237.2	1,556.2	1,556.2		1,556.2	1,556.2	
TOTAL WORKYEARS								
Hazardous Substance Response Trust Fund		1,350.3	1,716.0	1,716.0		1,716.0	1,716.0	
TOTAL WORKYEARS		1,350.3	1,716.0	1,716.0		1,716.0	1,716.0	

SUPERFUND

OVERVIEW AND STRATEGY

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, commonly known as Superfund, charges the Agency with the responsibility for providing emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites. The major emphasis of the Superfund program will continue to be to stabilize imminent threats at hazardous waste sites and to implement the necessary long-term remedial response actions. The Hazardous Substance Response Trust Fund finances the required activities to implement CERCLA primarily through excise taxes levied on oil and chemical manufacturers. The authority to collect taxes expired on September 30, 1985.

The 1987 request is based on the Administration's reauthorization proposal and represents a continuing major investment in addressing the serious environmental and human health problems caused by hazardous substance releases and inactive hazardous waste disposal sites. The request provides $1,050 million supported by 1,716 workyears to continue Superfund cleanup activities.

As authorized under CERCLA, the Agency will respond to releases of hazardous substances, pollutants, and contaminants by either a removal or remedial action or by compelling responsible parties to undertake the response action. Removal actions are generally short-term responses taken to abate an immediate threat posed by the uncontrolled release of hazardous substances at sites or spills into the air, land, or water. Remedial actions involve long-term and more permanent remedies taken instead of, or in addition to, removal actions. The program will continue to select sites for remedial action from the National Priorities List (NPL) and to undertake all response actions in accordance with the National Contingency Plan.

While the Agency has the primary responsibility for implementing the program, CERCLA and Executive Order 12316 provide a clear mandate for the Agency to work closely with a variety of other Federal agencies and the States to carry out the Act.

The Agency undertakes five major activities in implementing the Superfund program: Hazardous Substance Response, Interagency Support, Enforcement, Research and Development, and Management and Support. The effective integration of these activities involves close cooperation among various Agency offices, the States, and other Federal agencies with specific program responsibilities.

CONTINGENCY PLAN

On September 30, 1985, the taxing authority of Superfund expired. In anticipation that reauthorization would not occur by October 1, 1985, the Agency developed a contingency plan to ensure that the Agency could maintain sufficient funding to continue operation of the Superfund program in 1986. On August 14, 1985, the Administrator implemented the Superfund Contingency Plan by stopping planned obligations for new remedial design and construction activities. Other remedial and all removal activities continued. This delayed work at 57 sites and was the primary reason the Agency was able to carry over approximately $185 million for use in 1986. The available funding has increased by approximately $20 million in 1986 through additional revenues gained from cost recovery, interest, and residual taxes.

The available funding is sufficient to maintain the Agency's workforce through 1986 and provide funding for six months of reduced program operations. The basic strategy underlying the Contingency Plan is that the earlier, less costly phases of long term cleanup and the contract and personnel infrastructure of the program should be supported to the maximum extent practicable so that program momentum can be restored quickly following reauthorization. Specifically, the plan calls for

1) maintaining the current workforce for the entire year to allow the program to work toward finishing ongoing site work and to ensure that no momentum is lost once reauthorization occurs; 2) ensuring adequate funding for emergency response actions; 3) continuing incremental funding for ongoing remedial site work; 4) pursuing an aggressive enforcement program so that long-term cleanup can be initiated by responsible parties; and 5) maintaining the necessary support contracts for analytical, technical, and program support.

Any work beyond this plan in 1986 is contingent upon additional funding being made available through a reauthorization of the taxing authority of Superfund.

Hazardous Substance Response

The Hazardous Substance Response program is responsible for protecting human health and the environment from the dangers associated with releases of hazardous substances into the environment by providing the necessary funding and support to undertake short-term emergency responses and long-term site cleanup. The activities include responding to spills and emergency releases of hazardous substances and conducting remedial work at abandoned and uncontrolled hazardous waste sites.

The Agency coordinates an emergency response program to deal with the most serious hazardous substance spills and site emergencies where the responsible party or State and local governments are unable to respond adequately. The Agency also conducts a comprehensive program to evaluate all known hazardous waste sites, to establish priorities for remedial response, and to undertake the appropriate remedy at as many sites as possible.

The emphasis in 1987 will be to restore program momentum and implement a balanced program to ensure that environmental threats posed by sites are addressed as quickly and effectively as possible. The funds requested, together with anticipated unobligated balances from 1986, will ensure that the Agency is able to commence remedial action at most sites where design work is completed prior to or during the year. The Agency will be implementing programmatic changes to speed up the remedial process and to improve both the management and technical performance of the remedial program. Also, the Agency will place an emphasis on selecting alternative technologies, when they are cost-effective, as part of on-site remedies. At least one alternative to land disposal will be evaluated as part of the remedy selection process at each site.

The request for 1987 will also ensure an adequate level of resources to support activities that complement direct response actions. The Agency's Environmental Response Team will continue to provide training and technical support to Agency, State, and local government personnel. Also, the Agency will continue to develop a system for collecting comprehensive national notification and response data on accidental releases of oil and hazardous substances. The program will establish mechanisms to facilitate the transfer of research and other technical information among decision-makers with emphasis on the transfer of information concerning alternative technologies to land disposal. Activities under the Chemical Emergency Preparedness Program (part of the Agency's Air Toxics strategy) will focus on providing training and technical assistance to States and priority areas. The Agency will also carry out simulations and exercises to evaluate contingency plans, preparedness, and response operations.

In 1986, emergency actions are being conducted under the contingency plan, which is in effect until the Superfund taxing authority is reauthorized. Actions are being taken in those situations where the Agency must respond to threats to human health or the environment. The Agency expects to assume a greater role in 1987 by expanding the definition of emergency response to include threats of releases. This should help to prevent actual releases of hazardous substances. Broader language contained in the revised National Contingency Plan will result in a greater number of National Priorities List (NPL) sites being targeted for emergency response actions. New remedial activities in 1986 have had to be severely curtailed under the Contingency Plan pending reauthorization.

The Agency responded to 196 hazardous spills and site emergencies in 1985, approximately equal to the 204 Agency response actions in 1984. Other accomplishments in 1985 under the Agency's long-term cleanup program include the completion of preliminary assessments at 5,137 sites and more detailed site assessments at 1,616 sites. In addition, the Agency initiated Fund-financed remedial investigations/feasibility studies (RI/FS) at 115 sites, Fund-financed remedial designs (RD) at 16 sites, and Fund-financed remedial actions (RA) at 5 sites.

Hazardous Substance Response - Interagency

CERCLA requires the Federal government to implement a coordinated program to respond to spills of hazardous substances and abandoned or uncontrolled waste sites containing hazardous substances. To this end, the following agencies provide support to EPA: Department of Health and Human Services, Department of Justice, Department of Transportation, Department of Commerce, Federal Emergency Management Agency, Department of Labor, and Department of Interior.

Executive Order 12316, signed by the President in August 1981, requires EPA to manage an interagency budget process which culminates in a consolidated budget for all the agencies that support the Superfund program. The activities of other Federal agencies are divided into two basic categories. The first category includes those activities which are episodic in nature and taken in direct support of specific site or spill response actions. With the exception of the Federal Emergency Management Agency, these actions are financed on a reimbursable basis from the funds appropriated to the Hazardous Spill and Site Response program. The second category of other Federal agency involvement is support for on-going activities which are generally not incident-specific. These activities include developing program policies and guidance, conducting health research, training response personnel, litigating civil and criminal cases, and providing scientific and technical advice to EPA on-scene coordinators. All funds are provided through transfer allocation accounts with the exception of the United States Coast Guard (USCG). Funds are transferred to the USCG on a reimbursable basis.

In 1987, other Federal agencies will resume the full scope of ongoing activities consistent with the direction in the Executive order. As part of the Superfund Contingency Plan, other Federal agencies participating in the Superfund program are limiting their 1986 activities to those determined to be essential and consistent with the Agency's. New projects proposed in 1986 are being deferred until new authorizing legislation is signed. Major interagency activities in 1985 included: conducting on-going health related studies, litigating civil and cost recovery cases, operating the National Response Center, ensuring worker health and safety, and providing relocation assistance and training.

Hazardous Substance Response - Enforcement

The Hazardous Substance Response Enforcement program protects human health and the environment by securing privately-financed response to actual or threatened releases of hazardous substances. The program pursues privately-financed response for the cleanup of hazardous waste sites and for the recovery of funds spent on Federal response actions.

To accomplish its mission, the enforcement program provides legal and technical support for negotiations for privately-financed response; develops and executes CERCLA Section 106 orders to compel responsible party response; and initiates civil, criminal, and CERCLA Section 107 cost recovery cases for referral to the Department of Justice (DOJ). The program also provides technical and legal support for ongoing cases filed by DOJ on behalf of the Agency and reviews and comments on State Lead enforcement actions. The National Enforcement Investigations Center (NEIC) provides specialized technical support for cases filed under CERCLA and provides evidence audit and case management support for major Superfund actions.

In 1987, the Agency will continue to focus its enforcement efforts on those sites included on the NPL where administrative actions are most likely to result in privately-financed response actions. This will be achieved through negotiation, issuance of administrative orders, and, where necessary, judicial action. The Regions will continue devoting effort to the ground water protection strategy where it involves CERCLA issues. Resources will also be devoted to additional civil referrals and expected increases in remedial actions as RI/FS are completed on CERCLA sites. Headquarters will develop guidance specifically targeted to 1) expeditious resolution of CERCLA Section 106 cases; 2) further delegations of settlement authority for cost recoveries and certain CERCLA Section 106 cases; 3) expanded use of alternatives to litigation; 4) revisions to insurance and bankrupcy guidances; 5) integration of the enforcement of the RCRA and CERCLA programs; and 6) revised CERCLA Section 106 Administrative Order guidance.

Although the Hazardous Substance Response portion of the Superfund program has been slowed pending reauthorization, the enforcement program continues aggressively to seek privately-financed response and to recover monies spent by the Trust Fund. In addition to continuing oversight of RP response actions commenced in previous years, in 1986, the Agency will achieve RP agreements to start approximately 49 removals, 50 RI/FS, and 50 remedial designs by administrative and judicial means. Moreover, there will be an increased effort to resolve swiftly the ongoing case docket as a result of 1985 CERCLA initiatives in RI/FS and the increase in civil judicial referrals.

The value of the enforcement program is demonstrated by the fact that during 1985, Responsible Parties at 102 sites responded to enforcement actions and have agreed to conduct cleanup activities with an estimated value of $126 million. This brings the total estimated value of cleanup actions achieved through enforcement procedures from the program's inception to $481 million. In addition to compelling RPs to conduct cleanup activities, the program seeks recovery of Trust Fund expenditures for Federally-financed response actions. During 1985, of the 55 cases developed, 32 cost recovery cases were referred to the DOJ seeking $27 million. In addition to these new cases referred to DOJ, the Agency achieved $22 million in settlements from cases referred to DOJ this year and in prior years. The total cost recovery settlements to date are over $25 million.

The following guidance was also developed in 1985: 1) CERCLA settlement policy; 2) EPA/State Relationships in Enforcement Actions for Sites on the National Priorities List; 3) procedures for issuing Notice Letters; 4) a model CERCLA Section 106 Consent Order for an RI/FS; 5) preparation of decision documents for approving Fund-financed and Potential Responsible Party (PRP) remedial actions under CERCLA; 6) cost recovery procedures manual; 7) procedures for planning and implementing off-site response actions; and 8) RI and FS guidance.

Hazardous Substance Research

The Research and Development program supports the Agency, States, and industry in resolving technical problems that inhibit implementation of removal and remedial actions. Support focuses on adapting existing technologies, procedures, and scientific information for application to uncontrolled sites. This support includes providing tailored guidance documents, operations manuals, risk and site assessment techniques, and direct technical assistance to implementing personnel at all levels. The specific objectives of the program are providing techniques and procedures for site and situation assessment; evaluating technologies for managing uncontrolled sites; developing procedures for ensuring effective assessment of sites which have been cleaned up; evaluating personnel health, protective equipment, and procedures; developing reportable quantities information; providing technical support for enforcement, program, and Regional offices; and, providing quality assurance support.

As the Research and Development program resumes its momentum in 1987, it will provide the guidance documents, operations manuals, assessment techniques, and technical expertise needed to meet the requirements of the Superfund program. As a result of the nature of Research and Development's support of the Superfund program, the Superfund Contingency Plan's reduction in the level of response activity has produced a corresponding and proportionate reduction in the level and nature of research and development support. In 1985, the program's accomplishments included 1) a ground and surface water modeling user's guide; 2) risk assessment support for the enforcement program for 15 states; 3) provision of 58 Health Effects Assessment documents; 4) development of 90 chronic toxity components for reportable quantity documents; and 5) a summary of the Quality Assurance provided to the National contract laboratory program.

Hazardous Substance Management And Support

This function provides the full array of financial, administrative, and support services necessary to manage and implement the Superfund program. This includes financial management to track and report on the use of the Hazardous Substance Response Trust Fund; administrative management for contract, personnel, information systems, office and laboratory services, and safety training: services to cover the costs of space, utilities, and other non-personnel support needs; and computer services to fund data processing costs. Management and support also includes the support of legal services; auditing services; policy analysis and program evaluation; budget development and oversight: and lab support for Superfund research.

In 1987, management and support will be expected to support fully the increasing Superfund program. In particular, this includes expanded contract capability as extramural dollars increase and additional support of Superfund cost recovery actions as additional Fund-financed actions are completed.

In 1986, under the Contingency Plan, all attempts have been made to maintain the program's personnel and contractual infrastructure. Services have not yet been reduced in 1986. This should assist the program to regain quickly its momentum following reauthorization. Accomplishments in 1985 include improving and maintaining detailed site specific transaction records; recruiting specialized personnel nationwide; providing cost documentation to support cost recovery litigation; maintaining sophisticated ADP systems to track hazardous waste site funding and oversight of Agency compliance with unique Trust Fund requirements; and completing Superfund audits of EPA contractors and assistance recipients, and internal and management audits of Superfund activities.

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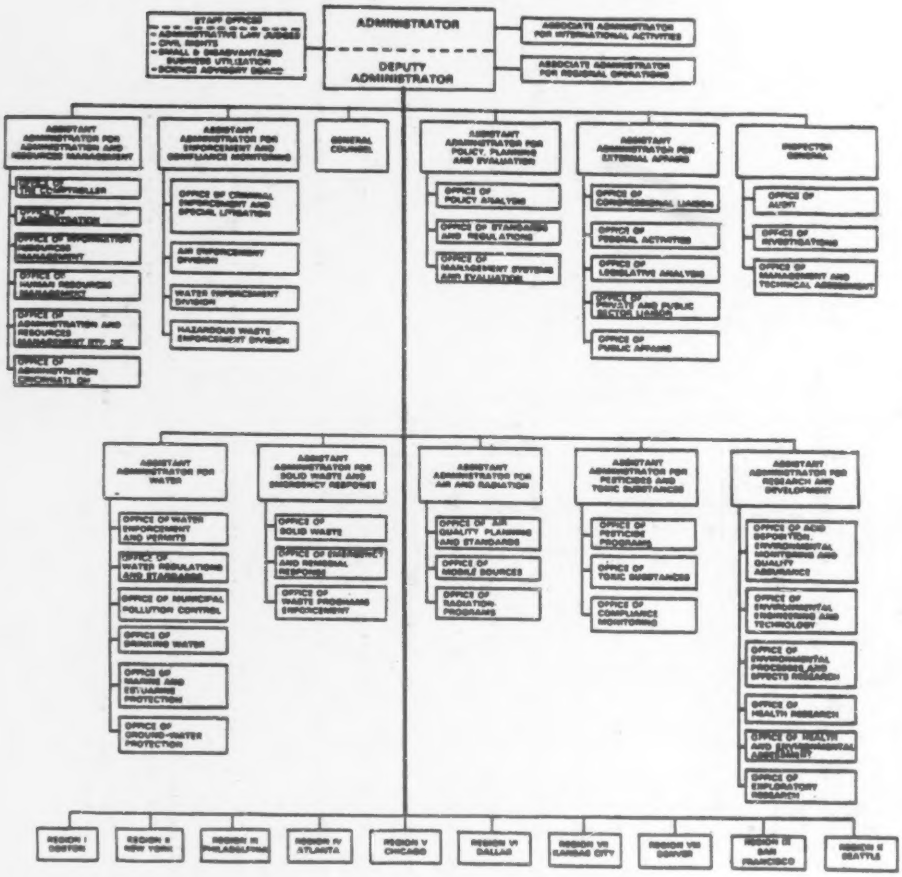
STAFF OFFICES
- ADMINISTRATIVE LAW JUDGES
- CIVIL RIGHTS
- SMALL & DISADVANTAGED BUSINESS UTILIZATION
- SCIENCE ADVISORY BOARD
ADMINISTRATOR
DEPUTY ADMINISTRATOR
ASSOCIATE ADMINISTRATOR FOR INTERNATIONAL ACTIVITIES
ASSOCIATE ADMINISTRATOR FOR REGIONAL OPERATIONS
ASSISTANT ADMINISTRATOR FOR ADMINISTRATION AND RESOURCES MANAGEMENT
OFFICE OF THE COMPTROLLER
OFFICE OF ADMINISTRATION
OFFICE OF INFORMATION RESOURCES MANAGEMENT
OFFICE OF HUMAN RESOURCES MANAGEMENT
OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT RTP, NC
OFFICE OF ADMINISTRATION CINCINNATI, OH
ASSISTANT ADMINISTRATOR FOR ENFORCEMENT AND COMPLIANCE MONITORING
OFFICE OF CRIMINAL ENFORCEMENT AND SPECIAL LITIGATION
AIR ENFORCEMENT DIVISION
WATER ENFORCEMENT DIVISION
HAZARDOUS WASTE ENFORCEMENT DIVISION
GENERAL COUNSEL
ASSISTANT ADMINISTRATOR FOR POLICY, PLANNING AND EVALUATION
OFFICE OF POLICY ANALYSIS
OFFICE OF STANDARDS AND REGULATIONS
OFFICE OF MANAGEMENT SYSTEMS AND EVALUATION
ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS
OFFICE OF CONGRESSIONAL LIAISON
OFFICE OF FEDERAL ACTIVITIES
OFFICE OF LEGISLATIVE ANALYSIS
OFFICE OF PRIVATE AND PUBLIC SECTOR LIAISON
OFFICE OF PUBLIC AFFAIRS
INSPECTOR GENERAL
OFFICE OF AUDIT
OFFICE OF INVESTIGATIONS
OFFICE OF MANAGEMENT AND TECHNICAL ASSESSMENT
ASSISTANT ADMINISTRATOR FOR WATER
OFFICE OF WATER ENFORCEMENT AND PERMITS
OFFICE OF WATER REGULATIONS AND STANDARDS
OFFICE OF MUNICIPAL POLLUTION CONTROL
OFFICE OF DRINKING WATER
OFFICE OF MARINE AND ESTUARINE PROTECTION
OFFICE OF GROUND-WATER PROTECTION
ASSISTANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE
OFFICE OF SOLID WASTE
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
OFFICE OF WASTE PROGRAMS ENFORCEMENT
ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION
OFFICE OF AIR QUALITY PLANNING AND STANDARDS
OFFICE OF MOBILE SOURCES
OFFICE OF RADIATION PROGRAMS
ASSISTANT ADMINISTRATOR FOR PESTICIDES AND TOXIC SUBSTANCES
OFFICE OF PESTICIDE PROGRAMS
OFFICE OF TOXIC SUBSTANCES
OFFICE OF COMPLIANCE MONITORING
ASSISTANT ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT
OFFICE OF ACID DEPOSITION, ENVIRONMENTAL MONITORING AND QUALITY ASSURANCE
OFFICE OF ENVIRONMENTAL ENGINEERING AND TECHNOLOGY
OFFICE OF ENVIRONMENTAL PROCESSES AND EFFECTS RESEARCH
OFFICE OF HEALTH RESEARCH
OFFICE OF HEALTH AND ENVIRONMENTAL ASSESSMENT
OFFICE OF EXPLORATORY RESEARCH
REGION I BOSTON
REGION II NEW YORK
REGION III PHILADELPHIA
REGION IV ATLANTA
REGION V CHICAGO
REGION VI DALLAS
REGION VII KANSAS CITY
REGION VIII DENVER
REGION IX SAN FRANCISCO
REGION X SEATTLE

ENVIRONMENTAL PROTECTION AGENCY

REGIONS
Locations and States

Region I	Headquarters, Boston, Massachusetts Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Region II	Headquarters, New York, New York New Jersey, New York, Puerto Rico Virgin Islands
Region III	Headquarters, Philadelphia, Pennsylvania Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
Region IV	Headquarters, Atlanta, Georgia Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
Region V	Headquarters, Chicago, Illinois Illinois, Indiana, Michigan Minnesota, Ohio, Wisconsin
Region VI	Headquarters, Dallas, Texas Arkansas, Louisiana, New Mexico Oklahoma, Texas
Region VII	Headquarters, Kansas City, Kansas Iowa, Kansas, Missouri, Nebraska
Region VIII	Headquarters, Denver, Colorado Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
Region IX	Headquarters, San Francisco, California Arizona, California, Hawaii, Nevada, American Samoa, Guam, Trust Territories of Pacific Islands, Northern Mariana Islands
Region X	Headquarters, Seattle, Washington Alaska, Idaho, Oregon, Washington

ENVIRONMENTAL PROTECTION AGENCY

Summary of Resources
By Appropriation
(dollars in thousands)

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Research and Development							
Budget Authority	$188,875.0	$212,400.0	$223,400.0	-$9,607.0	$213,793.0	$192,734.0	-$21,059.0
Obligations	192,278.4	212,061.0	223,100.0 1/	-9,607.0	213,493.0	193,344.2	-20,148.8
Outlays	160,780.5	193,678.0	198,258.8	-2,677.0	195,581.8	204,026.9	+8,445.1
Abatement, Control and Compliance							
Budget Authority	480,500.0	495,500.0	577,600.0	-24,837.0	552,763.0	490,785.0	-61,978.0
Obligations	517,985.3	505,911.0	585,784.0 1/	-24,837.0	560,947.0	492,699.9	-68,247.1
Outlays	441,133.2	488,844.0	532,512.7	-11,272.0	521,240.7	532,473.7	+11,233.0
Salaries and Expenses							
Budget Authority	665,698.1	670,416.0	684,176.0	-29,420.0	554,756.0	687,947.0	+33,191.0
Obligations	658,985.6	670,416.0	684,031.0 1/	-29,420.0	654,611.0	687,947.0	+33,336.0
Outlays	631,419.0	660,901.2	675,498.4	-25,188.0	650,310.4	675,535.6	+25,225.2
Permanent Workyears	9,904.8	10,227.7	10,595.1	...	10,595.1	10,452.9	-142.2
Total Workyears	11,001.4	11,302.7	11,582.7	...	11,582.7	11,382.7	-200.0
Buildings and Facilities							
Budget Authority	12,500.0	5,000.0	5,000.0	-215.0	4,785.0	5,000.0	+215.0
Obligations	5,228.1	10,190.0	5,148.0	-215.0	4,933.0	7,600.0	+2,667.0
Outlays	3,872.3	5,195.0	5,449.5	-55.0	5,394.5	8,405.5	+3,011.0
Operations, Research and Facilities							
Obligations	151.4	300.0	300.0	...	300.0	300.0	...
Outlays	298.7	280.0	500.0	...	500.0	500.0	...
SUBTOTAL, OPERATING PROGRAMS							
Budget Authority	$1,347,573.1	$1,383,316.0	$1,490,176.0	-$64,079.0	$1,426,097.0	$1,376,466.0	-$49,631.0
Obligations	$1,374,628.8	$1,398,878.0	$1,498,363.0 1/	-$64,079.0	$1,434,284.0	$1,381,891.1	-$52,392.9
Outlays	$1,237,503.7	$1,348,898.2	$1,412,219.4	-$39,192.0	$1,373,027.4	$1,420,941.7	+$47,914.3
Permanent Workyears	9,904.8	10,227.7	10,595.1	...	10,595.1	10,452.9	-142.2
Total Workyears	11,001.4	11,302.7	11,582.7	...	11,582.7	11,382.7	-200.0

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Hazardous Substance Response Trust Fund							
Budget Authority............	620,000.0 2/	900,000.0	900,000.0	-38,700.0	861,300.0	1,050,000.0	+188,700.0
Obligations.................	480,405.2	900,000.0	882,000.0 1/	-38,700.0	843,300.0	1,252,000.0	+408,700.0
Outlays.....................	360,311.6	670,000.0	480,000.0	-7,590.0	472,410.0	770,800.0	+298,390.0
Permanent Workyears.........	1,237.2	1,556.2	1,556.2	...	1,556.2	1,556.2	...
Total Workyears.............	1,350.3	1,716.0	1,716.0	...	1,716.0	1,716.0	...
Payment to Hazardous Substance Response Trust Fund							
Budget Authority............	(44,000.0)						
Obligations.................	(44,000.0)	...	...	...	...	...	...
Outlays.....................	(44,000.0)	...	...	...	...	...	...
Advances to Hazardous Substance Response Trust Fund							
Budget Authority............	...	...	...	...	(330,888.0)	(33,000.0)	(-297,888.0)
Obligations.................	...	...	...	...	(330,888.0)	(33,000.0)	(-297,888.0)
Outlays.....................	...	...	...	...	(330,888.0)	(33,000.0)	(-297,888.0)
Construction Grants							
Budget Authority............	2,400,000.0	2,400,000.0	600,000.0	-25,800.0	574,200.0 3/	... 4/	-574,200.0
Obligations.................	2,573,964.9	2,500,000.0	1,400,000.0	-25,800.0	1,374,200.0	108,267.0	-1,265,933.0
Outlays.....................	2,899,742.7	2,650,000.0	2,820,000.0	-258.0	2,819,742.0	2,355,200.0	-464,542.0
Scientific Activities Overseas							
Obligations.................	299.4	15.0	10.0	...	10.0	150.0	+140.0
Outlays.....................	62.3	100.0	268.0	...	268.0	342.0	+74.0
Revolving Fund							
Obligations.................	533.0	600.0	600.0	-28.0	572.0	750.0	+178.0
Outlays.....................	-117.0	15.0	-50.0	-28.0	-78.0	-1,250.0	-1,172.0
Misc. Contributed Funds							
Obligations.................	36.4	30.0	50.0	...	50.0	40.0	-10.0
Outlays.....................	8.2	25.0	25.0	...	25.0	25.0	...

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Reimbursements - Salaries and Expenses							
Obligations	17,789.1	20,000.0	20,000.0	-34.0	19,966.0	20,000.0	+34.0
Permanent Workyears	56.8	53.0	53.0	...	53.0	53.0	...
Total Workyears	63.6	62.0	62.0	...	62.0	62.0	...
Reimbursements - Superfund							
Obligations	5,584.1	7,000.0	18,000.0	-398.0	17,602.0	30,000.0	+12,398.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY							
Budget Authority	$4,367,573.1	$4,683,216.0	$2,990,176.0	-$128,579.0	$2,861,597.0	$2,426,466.0	-$435,131.0
Obligations	$4,453,240.9	$4,826,523.0	$3,819,022.0	-$129,039.0	$3,689,984.0	$2,793,098.1	-$896,885.9
Outlays	$4,497,511.5	$4,669,038.2	$4,712,462.4	-$47,068.0	$4,665,394.4	$4,546,058.7	-$119,335.7
Permanent Workyears	11,198.8	11,836.9	12,204.3	...	12,204.3	12,062.1	-142.2
Total Workyears	12,415.3	13,080.7	13,360.7	...	13,360.7	13,160.7	-200.0

1/ Obligations for these appropriations reflect the reduction to Consulting Services pursuant to P.L. 99-160: Salaries and Expenses - $145.0; Research and Development - $133.0; Abatement, Control and Compliance - $710.0. The reduction for Superfund of $240.0 was considered in the estimates for that program.

2/ The 1985 appropriation does not reflect a receipt shortfall of $13,918.0, which could reduce budget authority to $606,082.0.

3/ An additional $1.8 billion has been appropriated pending reauthorization.

4/ An amended budget request for $1.8 billion will be submitted immediately after appropriate reform legislation is enacted.

ENVIRONMENTAL PROTECTION AGENCY

Summary of Resources
By Media
(dollars in thousands)

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Air							
Budget Authority............	$234,580.1	$238,511.9	$259,548.4	-$11,160.5	$248,387.9	$239,228.4	-$9,159.5
Obligations.................	232,624.2	240,879.6	257,426.0	-11,160.5	246,265.5	239,549.0	-6,716.5
Outlays.....................	233,082.6	255,665.9	229,613.7	-6,624.9	222,988.8	235,868.6	+12,879.8
Permanent Workyears.........	1,583.2	1,604.0	1,713.9	...	1,713.9	1,660.2	-53.7
Total Workyears.............	1,710.0	1,751.6	1,830.6	...	1,830.6	1,791.1	-39.5
Water Quality							
Budget Authority............	251,717.3	241,686.2	256,580.4	-11,033.3	245,547.1	217,841.0	-27,706.1
Obligations.................	249,909.9	244,426.5	258,852.0	-11,033.3	247,818.7	218,584.0	-29,234.7
Outlays.....................	240,952.3	241,236.4	246,907.3	-6,595.9	240,311.4	235,732.7	-4,578.7
Permanent Workyears.........	1,957.0	2,003.3	2,056.5	...	2,056.5	2,021.1	-35.4
Total Workyears.............	2,191.5	2,248.6	2,283.0	...	2,283.0	2,181.8	-101.2
Drinking Water							
Budget Authority............	85.992.1	88,125.8	91,230.4	-3,923.2	87,307.2	84,126.5	-3,180.7
Obligations.................	85,244.9	89,040.4	90,144.0	-3,923.2	86,220.8	84,242.0	-1,978.8
Outlays.....................	86,081.7	98,286.3	87,423.1	-2,356.7	85,066.4	83,434.7	-1,631.7
Permanent Workyears.........	543.4	584.5	595.8	...	595.8	587.8	-8.0
Total Workyears.............	604.3	642.3	639.8	...	639.8	639.8	...
Hazardous Waste							
Budget Authority............	191,912.1	237,353.8	248,544.4	-10,686.8	237,857.6	256,236.2	+18,378.6
Obligations.................	194,075.6	240,244.7	248,758.0	-10,686.8	238,071.2	256,144.0	+18,072.8
Outlays.....................	150,793.3	197.408.7	214,677.5	-5,595.5	209,082.0	239,991.5	+30,909.5
Permanent Workyears.........	1,045.2	1,217.9	1,284.5	...	1,284.5	1,301.3	+16.8
Total Workyears.............	1,176.2	1,367.9	1,442.5	...	1,442.5	1,462.3	+19.8
Pesticides							
Budget Authority............	66,928.4	70.506.9	69,836.5	-3,002.9	66,833.6	69,433.1	+2,599.5
Obligations.................	70,521.5	71,031.4	70,969.0	-3,002.9	67,966.1	69,467.0	+1,500.9
Outlays.....................	61,155.0	57,560.2	67,142.7	-1,947.5	65,195.2	68,720.5	+3.525.3
Permanent Workyears.........	734.6	735.1	741.2	...	741.2	734.7	-6.5
Total Workyears.............	797.5	809.1	807.6	...	807.6	803.8	-3.8

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Radiation							
Budget Authority............	13,003.4	9,782.4	10,202.1	-438.6	9,763.5	11,972.0	+2,208.5
Obligations.................	12,354.5	9,828.5	12,707.0	-438.6	12,268.4	11,989.0	-279.4
Outlays.....................	16,068.9	9,758.4	12,723.5	-325.6	12,397.9	12,136.4	-261.5
Permanent Workyears.........	149.1	141.3	155.3	...	155.3	152.0	-3.3
Total Workyears.............	161.4	147.3	160.0	...	160.0	157.0	-3.0
Noise							
Budget Authority............	...	...	...	...	...	...	...
Obligations.................	...	...	...	...	...	...	...
Outlays.....................	45.9	469.7	395.9	...	395.9	184.7	-211.2
Interdisciplinary							
Budget Authority............	56,264.1	47,166.3	56,272.8	-2,419.6	53,853.2	47,874.9	-5,978.3
Obligations.................	55,489.9	47,292.6	55,770.0	-2,419.6	53,350.4	48,043.0	-5,307.4
Outlays.....................	54,857.8	48,252.6	60,916.3	-1,343.6	59,572.7	52,466.7	-7,106.0
Permanent Workyears.........	482.5	491.0	537.7	...	537.7	544.3	+6.6
Total Workyears.............	533.0	521.5	568.2	...	568.2	570.0	+1.8
Toxic Substances							
Budget Authority............	84,536.2	94,952.1	143,331.3	-6,163.1	137,168.2	89,327.7	-47,840.5
Obligations.................	124,604.6	95,511.7	149,397.0	-6,163.1	143,233.9	90,523.0	-52,710.9
Outlays.....................	84,562.6	94,151.1	125,687.4	-2,911.3	122,776.1	128,594.4	+5,818.3
Permanent Workyears.........	767.3	796.6	804.8	...	804.8	792.5	-12.3
Total Workyears.............	852.2	856.3	865.0	...	865.0	858.2	-6.8
Energy							
Budget Authority............	58,592.2	67,317.3	61,707.7	-2,654.3	59,053.4	59,589.4	+536.0
Obligations.................	56,812.5	67,219.5	61,957.0	-2,654.3	59,302.7	59,613.0	+310.3
Outlays.....................	41,692.6	58,659.6	62,301.4	-857.3	61,444.1	61,349.2	-94.9
Permanent Workyears.........	94.1	89.2	88.4	...	88.4	77.2	-11.2
Total Workyears.............	105.7	97.7	97.0	...	97.0	85.8	-11.2
Management and Support							
Budget Authority............	291,547.2	282,913.3	287,922.0	-12,381.7	275,540.3	295,836.8	+20,296.5
Obligations.................	287,763.1	283,513.1	288,223.0	-12,381.7	275,841.3	296,137.1	+20,295.8
Outlays.....................	264,338.7	282,254.3	298,981.1	-10,578.7	288,402.4	294,056.0	+5,622.2
Permanent Workyears.........	2,548.4	2,564.8	2,617.0	...	2,617.0	2,581.8	-35.2
Total Workyears.............	2,869.6	2,860.4	2,889.0	...	2,889.0	2,832.9	-56.1

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Buildings and Facilities							
Budget Authority............	12.500.0	5,000.0	5,000.0	-215.0	4,785.0	5,000.0	+215.0
Obligations..................	5,228.1	10,190.0	5,148.0	-215.0	4,933.0	7,600.0	+2,667.0
Outlays......................	3,872.3	5,195.0	5.449.5	-55.0	5,394.5	8,405.5	+3,011.0
SUBTOTAL, OPERATING PROGRAMS							
Budget Authority............	$1,347,573.1	$1,383,316.0	$1.490,176.0	-$64,079.0	$1,426,097.0	$1,376,466.0	-$49,631.0
Obligations..................	$1,374,628.8	$1,398,878.0	$1,499,351.0	-$64,079.0	$1,435,272.0	$1,381,891.1	-$53,380.9
Outlays......................	$1.237.503.7	$1,348,898.2	$1.412,219.4	-$39,192.0	$1,373,027.4	$1,420,941.7	+$47,914.3
Permanent Workyears..........	9,904.8	10,227.7	10,595.1	...	10,595.1	10,452.9	-142.2
Total Workyears..............	11,001.4	11,302.7	11,582.7	...	11,582.7	11.382.7	-200.0
Hazardous Substance Response Trust Fund							
Budget Authority............	620,000.0 1/	900,000.0	900,000.0	-38,700.0	861,300.0	1,050,000.0	+188,700.0
Obligations..................	480,405.2	900,000.0	882,000.0	-38,700.0	843,300.0	1,252,000.0	+408,700.0
Outlays......................	360,311.6	670,000.0	480,000.0	-7,590.0	472,410.0	770,800.0	+298,390.0
Permanent Workyears..........	1,237.2	1,556.2	1,556.2	...	1,556.2	1,556.2	...
Total Workyears..............	1,350.3	1,716.0	1.716.0	...	1,716.0	1,716.0	...
Payment to Hazardous Substance Response Trust Fund							
Budget Authority............	(44,000.0)	...	...	...	...	...	...
Obligations..................	(44,000.0)	...	...	...	...	...	...
Outlays......................	(44,000.0)	...	...	...	...	...	...
Advances to Hazardous Substance Response Trust Fund							
Budget Authority............	...	...	...	...	(330,888.0)	(33,000.0)	(-297,888.0)
Obligations..................	...	...	...	...	(330,888.0)	(33,000.0)	(-297,888.0)
Outlays......................	..	...	...	...	(330,888.0)	(33,000.0)	(-297,888.0)
Construction Grants							
Budget Authority............	2,400,000.0	2,400,000.0	600,000.0	-25,800.0	574,200.0 2/	... 3/	-574,200.0
Obligations..................	2,573,964.9	2,500,000.0	1,400,000.0	-25,800.0	1,374,200.0	108,267.0	-1,265,933.0
Outlays......................	2,899,742.7	2,650,000.0	2,820,000.0	-258.0	2,819,742.0	2,355,200.0	-464,542.0
Scientific Activities Overseas							
Obligations..................	299.4	15.0	10.0	...	10.0	150.0	+140.0
Outlays......................	62.3	100.0	268.0	...	268.0	342.0	+74.0

	Actual 1985	Budget Estimate 1986	Enacted 1986	Balanced Budget Reduction 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Revolving Fund							
Obligations	533.0	600.0	600.0	-28.0	572.0	750.0	+178.0
Outlays	-117.0	15.0	-50.0	-28.0	-78.0	-1,250.0	-1,172.0
Misc. Contributed Funds							
Obligations	36.4	30.0	50.0	...	50.0	40.0	-10.0
Outlays	8.2	25.0	25.0	...	25.0	25.0	...
Reimbursements - Salaries and Expenses							
Obligations	17,789.1	20,000.0	20,000.0	-34.0	19,966.0	20,000.0	+34.0
Permanent Workyears	56.8	53.0	53.0	...	53.0	53.0	...
Total Workyears	63.6	62.0	62.0	...	62.0	62.0	...
Reimbursements - Superfund							
Obligations	5,584.1	7,000.0	18,000.0	-398.0	17,602.0	30,000.0	+12,398.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY							
Budget Authority	$4,367,573.1	$4,683,316.0	$2,990,176.0	-$128,579.0	$2,861,597.0	$2,426,466.0	-$435,131.0
Obligations	$4,453,240.9	$4,826,523.0	$3,820,011.0	-$129,039.0	$3,690,972.0	$2,793,098.1	-$897,873.9
Outlays	$4,497,511.5	$4,669,038.2	$4,712,462.4	-$47,068.0	$4,665,394.4	$4,546,058.7	-$119,335.7
Permanent Workyears	11,198.8	11,836.9	12,204.3	...	12,204.3	12,062.1	-$142.2
Total Workyears	12,415.3	13,080.7	13,360.7	...	13,360.7	13,160.7	-$200.0

NOTE:

The 1986 obligation estimates for the operating programs do not reflect the reduction for consulting services pursuant to P.L. 99-160; Salaries and Expense - $145.0; Research and Development - $133.0; and Abatement, Control & Compliance - $710.0. The reduction for Superfund of $240.0 was considered in the estimates for that program.

1/ The 1985 appropriation does not reflect a receipt shortfall of $13,918.0, which could reduce budget authority to $606,082.0.

2/ An additional $1.8 billion has been appropriated pending reauthorization.

3/ An amended budget request for $1.8 billion will be submitted immediately after appropriate reform legislation is enacted.

ENVIRONMENTAL PROTECTION AGENCY

1986 Workyears and Budget Authority
By Media and Appropriation
(dollars in thousands)

	Salaries & Expenses		Abatement, Control & Compliance	Research & Development	Total	
	Total Workyears	Amount	Amount	Amount	Total Workyears	Amount
Air..............................	1,830.6	$83,145.2	$120,895.9	$44,346.8	1,830.6	$248,387.9
Water Quality.....................	2,283.0	95,517.0	138,427.1	11,603.0	2,283.0	245,547.1
Drinking Water....................	639.8	27,680.7	45,230.8	14,395.7	639.8	87,307.2
Hazardous Waste...................	1,442.5	60,593.4	139,092.5	38,171.7	1,442.5	237,857.6
Pesticides........................	807.6	35,908.9	24,358.7	6,566.0	807.6	66,833.6
Radiation.........................	160.0	7,695.4	2,052.3	15.8	160.0	9,763.5
Interdisciplinary.................	568.2	25,620.0	7,425.4	20,807.8	568.2	53,853.2
Toxic Substances..................	865.0	38,145.8	75,280.3	23,742.1	865.0	137,168.2
Energy............................	97.0	4,909.3	...	54,144.1	97.0	59,053.4
Management and Support............	2,889.0	275,540.3	...	...	2,889.0	275,540.3
Subtotal..........................	11,582.7	$654,756.0	$552,763.0	$213,793.0	11,582.7	$1,421,312.0
Buildings and Facilities..........	...	...	...	...	...	4,785.0
Reimbursements....................	...	...	...	...	62.0	...
Hazardous Substance Response Trust Fund......................	...	...	...	...	1,716.0	861,300.0
Advances to the Hazardous Substance Response Trust Fund.............	...	...	...	...	...	(330,888.0)
Subtotal..........................	11,582.7	$654,756.0	$552,763.0	$213,793.0	13,360.7	$2,287,397.0
Construction Grants...............	...	...	...	...	...	574,200.0
Total.............................	11,582.7	$654,756.0	$552,763.0	$213,793.0	13,360.7	$2,861,597.0

ENVIRONMENTAL PROTECTION AGENCY

1987 Workyears and Budget Authority
By Media and Appropriation
(dollars in thousands)

	Salaries & Expenses		Abatement, Control & Compliance	Research & Development	Total	
	Total Workyears	Amount	Amount	Amount	Total Workyears	Amount
Air	1,791.1	$84,208.4	$117,828.0	$37,192.0	1,791.1	$239,228.4
Water Quality	2,181.8	95,712.1	114,628.9	7,500.0	2,181.8	217,841.0
Drinking Water	639.8	28,378.5	42,863.0	12,885.0	639.8	84,126.5
Hazardous Waste	1,462.3	66,175.2	153,692.0	36,369.0	1,462.3	256,236.2
Pesticides	803.8	37,766.1	23,953.1	7,713.9	803.8	69,433.1
Radiation	157.0	8,161.4	3,810.6	...	157.0	11,972.0
Interdisciplinary	570.0	27,225.2	5,133.7	15,516.0	570.0	47,874.9
Toxic Substances	858.2	38,996.9	28,875.7	21,455.1	858.2	89,327.7
Energy	85.8	5,486.4	...	54,103.0	85.8	59,589.4
Management and Support	2,832.9	295,836.8	...	...	2,832.9	295,836.8
Subtotal	11,382.7	$687,947.0	$490,785.0	$192,734.0	11,382.7	$1,371,466.0
Buildings and Facilities	...	...	...	...	...	5,000.0
Reimbursements	...	...	...	...	62.0	...
Hazardous Substance Response Trust Fund	...	...	...	...	1,716.0	1,050,000.0
Advances to the Hazardous Substance Response Trust Fund	...	...	...	...	...	(33,000.0)
Subtotal	11,382.7	$687,947.0	$490,785.0	$192,734.0	13,160.7	$2,426,466.0
Construction Grants	...	...	...	...	...	...
Total	11,382.7	$687,947.0	$490,785.0	$192,734.0	13,160.7	$2,426,466.0

ENVIRONMENTAL PROTECTION AGENCY

Summary of State Grant Resources
(in thousands of dollars)

	ACTUAL 1985	CURRENT ESTIMATE 1986	ESTIMATE 1987	INCREASE + DECREASE - 1987 vs 1986
AIR	$90,486.0	$95,732.5	$95,000.0	-$732.5
Section 105.................	90,486.0	95,732.5	95,000.0	-732.5
WATER QUALITY	61,313.4	66,894.3	52,100.0	-14,794.3
Section 106.................	61,313.4	62,109.3	52,100.0	-10,009.3
Clean Lakes.................	...	4,785.0	...	-4,785.0
DRINKING WATER	38,836.4	39,141.5	36,950.0	-2,191.5
Public Water Systems Program Grants............	28,424.3	28,183.7	28,450.0	+266.3
Underground Injection Control Program...........	8,312.1	8,708.9	8,500.0	-208.9
Special Studies & Demos.....	2,100.0	2,248.9	...	-2,248.9
HAZARDOUS WASTE	56,711.7	66,750.7	73,000.0	+6,249.3
Hazardous Waste Management..	46,663.2	55,506.0	63,000.0	+7,494.0
Hazardous Waste Initiative..	5,048.5	4,545.7	...	-4,545.7
Hazardous Waste Compliance..	5,000.0	...	...	...
Underground Storage Tanks...	...	6,699.0	10,000.0	+3,301.0
PESTICIDES	12,300.8	11,774.5	11,203.4	-571.1
Pesticides Enf. Grants......	9,717.0	9,286.2	8,703.4	-582.8
Pesticides Cert. & Training.	2,583.8	2,488.3	2,500.0	+11.7
TOXIC SUBSTANCES	1,500.0	2,201.1	2,200.0	-1.1
Toxics Enf. Grants..........	1,500.0	2,201.1	2,200.0	-1.1
SUBTOTAL............	$261,148.3	$282,494.6	$270,453.4	-$12,041.2
CONSTRUCTION GRANTS..........	2,573,964.8	574,200.0	...	-574,200.0
TOTAL................	$2,835,113.1	$856,694.6	$270,453.4	-$586,241.2

ENVIRONMENTAL PROTECTION AGENCY

History of State Grant Budget Authority
Part I: 1971 - 1976
(in thousands of dollars)

	1971	1972	1973	1974	1975	1976
AIR	$30,200	$42,900	$50,000	$50,000	$55,268	$51,518
Section 105	30,200	42,900	50,000	50,000	55,268	51,518
Section 175	...	...	...	...	...	...
WATER QUALITY	10,000	15,000	70,000	150,000	199,625	112,375
Section 106	10,000	15,000	20,000	50,000	45,625	44,375
Section 208	...	...	50,000 1/	100,000 1/	150,000 1/	53,000
Clean Lakes	...	...	...	...	4,000	15,000
DRINKING WATER	...	...	...	...	...	10,000
Public Water Systems	...	...	...	...	...	7,500
Underground Injection	...	...	...	...	...	2,500
Special Studies & Demos	...	...	...	...	...	...
HAZARDOUS WASTE	1,629	2,545	3,250	...	...	1,800
Haz. Waste Management	...	...	...	...	...	...
Solid Waste Management	1,629	2,545	3,250	...	...	1,800
Resource Recovery	...	...	...	...	...	...
Hazardous Waste Initiative	...	...	...	...	...	...
Hazardous Waste Compliance	...	...	...	...	...	...
Underground Storage Tanks	...	...	...	...	...	...
PESTICIDES	...	...	...	...	...	...
Pesticides Enf. Grants	...	...	...	...	...	...
Pesticides Cert. & Training	...	...	...	*	*	*
TOXIC SUBSTANCES	...	...	...	...	...	...
Toxic Enf. Grants	...	...	...	...	...	...
TOTAL	$41,829	$60,445	$123,250	$200,000	$254,893	$175,693

1/ CONTRACT AUTHORITY

* Pesticides certification and training data for these years is unavailable.

ENVIRONMENTAL PROTECTION AGENCY

History of State Grant Budget Authority
Part II: 1977 - 1982
(in thousands of dollars)

	1977	1978	1979	1980	1981	1982
AIR	$55,550	$66,135	$130,025	$82,800	$87,673	$87,735
Section 105	55,550	66,135	80,025	82,800	87,673	87,735
Section 175	...	...	50,000	...	...	...
WATER QUALITY	80,000	128,110	108,003	101,230	95,696	60,200
Section 106	50,000	52,400	52,400	48,730	51,223	51,200
Section 208	15,000	59,509	41,028	37,500	33,473	...
Clean Lakes	15,000	16,201	14,575	15,000	11,000	9,000
DRINKING WATER	20,000	27,110	36,270	34,745	37,598	37,848
Public Water Systems	15,000	20,500	26,400	29,450	29,450	29,450
Underground Injection	5,000	6,000	7,600	4,395	6,648	6,575
Special Studies & Demos	...	610	2,270	900	1,500	1,823
HAZARDOUS WASTE	2,925	14,304	44,886	38,600	38,570	41,700
Haz. Waste Management	...	...	15,018	18,600	26,487	41,700
Solid Waste Management	2,925	14,304	15,150	10,000	8,083	...
Resource Recovery	...	...	14,718	10,000	4,000	...
Hazardous Waste Initiative	...	...	...	...	...	...
Hazardous Waste Compliance	...	...	...	...	...	...
Underground Storage Tanks	...	...	...	...	...	...
PESTICIDES	1,000	7,280	13,052	12,393	10,972	11,202
Pesticides Enf. Grants	1,000	5,000	9,538	8,750	8,020	8,632
Pesticides Cert. & Training	*	2,280	3,514	3,643	2,952	2,570
TOXIC SUBSTANCES	...	...	...	...	1,000	500
Toxic Enf. Grants	...	...	...	...	1,000	500
TOTAL	$159,475	$242,939	$332,236	$269,768	$271,509	$239,185

ENVIRONMENTAL PROTECTION AGENCY

History of State Grant Budget Authority
Part III: 1983 - 1987
(in thousands of dollars)

	1983	1984	1985	1986 Current Estimate	1987 Estimate
AIR	$85,050	$87,684	$90,937	$95,733	$95,000
Section 105	85,050	87,684	90,937	95,733	95,000
Section 175	...	...	...	...	...
WATER QUALITY	57,200	59,259	66,299	66,894	52,100
Section 106	54,200	54,259	61,299	62,109	52,100
Section 208	...	...	...	...	...
Clean Lakes	3,000	5,000	5,000	4,785	...
DRINKING WATER	36,425	36,850	39,050	39,142	36,950
Public Water Systems	27,450	27,450	28,450	28,184	28,450
Underground Injection	7,075	7,500	8,500	8,709	8,500
Special Studies & Demos	1,900	1,900	2,100	2,249	...
HAZARDOUS WASTE	44,068	46,850	57,145	66,751	73,000
Haz. Waste Management	44,068	46,850	46,970	55,506	63,000
Solid Waste Management	...	...	...	...	...
Resource Recovery	...	...	...	...	...
Hazardous Waste Initiative	...	...	5,175	4,546	...
Hazardous Waste Compliance	...	...	5,000	...	...
Underground Storage Tanks	...	...	...	6,699	10,000
PESTICIDES	10,718	10,860	12,321	11,774	11,203
Pesticides Enf. Grants	8,718	8,703	9,717	9,286	8,703
Pesticides Cert. & Training	2,000	2,157	2,604	2,488	2,500
TOXIC SUBSTANCES	...	500	1,500	2,201	2,200
Toxic Enf. Grants	...	500	1,500	2,201	2,200
TOTAL	$233,461	$242,003	$267,252	$282,495	$270,453

ENVIRONMENTAL PROTECTION AGENCY

Permanent Positions By Grade

SALARIES AND EXPENSES

Grades	Actual 1985	Current Estimate 1986	Estimate 1987
Executive Level II	1	2	2
Executive Level III	1	2	2
Executive Level IV	6	7	7
Executive Level V	1	2	2
Subtotal	9	13	13
ES-6	4	4	4
ES-5	40	40	40
ES-4	83	83	83
ES-3	52	55	55
ES-2	26	27	27
ES-1	12	19	19
Subtotal	217	228	228
GS-16	10	10	10
GS/GM-15	580	583	580
GS/GM-14	1,203	1,213	1,213
GS/GM-13	1,788	1,800	1,790
GS-12	1,864	1,900	1,865
GS-11	968	992	970
GS-10	59	70	70
GS-9	732	750	750
GS-8	191	200	200
GS-7	855	900	855
GS-6	471	490	471
GS-5	647	675	667
GS-4	314	330	330
GS-3	101	110	110
GS-2	10	16	16
GS-1	...	...	...
Subtotal	9,793	10,039	9,897

Grades	Actual 1985	Current Estimate 1986	Estimate 1987
Positions established by act of July 1, 1974 (42 U.S.C. 207):			
Assistant Surgeon General, $40,579 to $68,700	...	...	...
Director grade, $30,074 to $51,955	70	70	70
Senior grade 05, $24,055 to $42,390	101	102	102
Full grade 04, $20,275 to $35,449	42	42	42
Assistant grade 03, $18,842 to $30,658	7	7	7
Subtotal	220	221	221
Positions established by act of November 16, 1977 (42 U.S.C. 201) compensation for which is not to exceed the maximum rate payable for a GS-18	17	19	19
Ungraded	71	75	75
TOTAL PERMANENT POSITIONS	10,327	10,595	10,453

ENVIRONMENTAL PROTECTION AGENCY

Permanent Positions By Grade

HAZARDOUS SUBSTANCES RESPONSE TRUST FUND

Grades	Actual 1985	Current Estimate 1986	Estimate 1987
ES-5	2	2	2
ES-4	3	3	3
ES-3	2	2	2
ES-2	4	4	4
ES-1	1	6	6
Subtotal	12	17	17
GS/GM-15	43	45	45
GS/GM-14	87	90	90
GS/GM-13	221	250	250
GS-12	294	325	325
GS-11	159	200	200
GS-10	1	10	10
GS-9	99	142	142
GS-8	7	20	20
GS-7	108	150	150
GS-6	42	75	75
GS-5	80	101	101
GS-4	50	75	75
GS-3	15	25	25
GS-2	2	12	12
GS-1	...	...	...
Subtotal	1,208	1,520	1,520

Grades	Actual 1985	Current Estimate 1986	Estimate 1987
Positions established by act of July 1, 1974 (42 U.S.C. 207):			
Assistant Surgeon General, $40,579 to $68,700	...	...	...
Director grade, $30,074 to $51,955	4	4	4
Senior grade 05, $24,055 to $42,390	6	5	5
Full grade 04, $20,275 to $35,449	5	5	5
Assistant grade 03, $18,842 to $30,658	2	2	2
Subtotal	17	16	16
Positions established by act of November 16, 1977 (42 U.S.C. 201) compensation for which is not to exceed the maximum rate payable for a GS-18	1	1	1
Ungraded	...	2	2
TOTAL PERMANENT POSITIONS	1,238	1,556	1,556

ENVIRONMENTAL PROTECTION AGENCY

Permanent Positions By Grade

REIMBURSABLES

(SALARIES AND EXPENSES)

Grades	Actual 1985	Current Estimate 1986	Estimate 1987
GS/GM-15	3	3	3
GS/GM-14	2	2	2
GS/GM-13	2	2	2
GS-12	5	5	5
GS-11	10	9	9
GS-10	4	4	4
GS-9	7	5	5
GS-8	1	1	1
GS-7	6	5	5
GS-6	2	2	2
GS-5	5	5	5
Subtotal	47	43	43
Positions established by act of July 1, 1974 (42 U.S.C. 207):			
Director grade 06, $30,074 to $51,955	5	6	6
Senior grade 05, $24,055 to 42,390	3	3	3
Subtotal	8	9	9
Ungraded	1	1	1
TOTAL PERMANENT POSITIONS	56	53	53

ENVIRONMENTAL PROTECTION AGENCY

Average Employment and Salary

Appropriation/Pay Plan	1985 Actuals	1986 Current Estimate	1987 President's Budget
Salaries and Expenses			
Average ES Salary	$67,523	$67,523	$67,523
Average GS Grade	10.207	10.207	10.207
Average GS Salary	$32,672	$32,672	$32,672
Average Salary of Ungraded Positions	$45,892	$45,892	$45,892
Revolving Fund			
Average GS Grade	10.207	10.207	10.207
Average GS Salary	$32,672	$32,672	$32,672
Superfund			
Average ES Salary	$66,326	$66,326	$66,326
Average GS Grade	10.051	10.051	10.051
Average GS Salary	$30,699	$30,699	$30,699
Reimbursables			
Average GS Grade	9.415	9.415	9.415
Average GS Salary	$28,838	$28,838	$28,838
TOTAL AVERAGE			
Average ES Salary	$67,460	$67,460	$67,460
Average GS Grade	10.187	10.187	10.187
Average GS Salary	$32,444	$32,444	$32,444
Average Salary of Ungraded Positions	$45,892	$45,892	$45,892

* Average GS Salary of Ungraded positions includes AD, ED, EF, EH, EI, EX, and SES pay plans.

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

RESEARCH AND DEVELOPMENT

OBJECT CLASSES	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
22.0 Transportation of things	$3.0	...	...	...	...	...
23.2 Rental payments to others	1.0	...	...	...	...	...
25.0 Other services	118,275.7	$121,245.7	$133,541.4	$127,864.0	$120,078.3	-$7,785.7
26.0 Supplies and materials	29.0	...	...	...	...	...
31.0 Equipment	26.4	...	...	...	...	...
41.0 Grants, subsidies, and contributions	73,943.3	90,815.3	89,558.6	85,629.0	73,265.9	-12,363.1
Total obligations	$192,278.4	$212,061.0	$223,100.0	$213,493.0	$193,344.2	-$20,148.8

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Transportation of things	$3.0	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						
Rental payments to others	$1.0	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						
Other services	$118,275.7	$121,245.7	$133,541.4	$127,864.0	$120,078.3	
The decrease in the 1987 request reflects the government-wide commitment to deficit reduction						-$7,785.7

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$5,677.4		
Supplies and materials..........................	$29.0	...	...	...	...	...
There is no request in 1987 and no change in the 1986 estimate.						
Equipment.......................................	$26.4	...	...	...	...	...
There is no request in 1987 and no change in the 1986 estimate.						
Grants, subsidies, and contributions............	$73,943.3	$90,815.3	$89,558.6	$85,629.0	$73,265.9	
The decrease in the 1987 request reflects the government-wide commitment to deficit reduction..						-$12,363.1
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$3,929.6		

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

ABATEMENT, CONTROL AND COMPLIANCE

OBJECT CLASSES	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
21.0 Travel and transportation of persons......	$172.4	$265.0	$259.7	$259.7	$265.6	+$5.9
22.0 Transportation of things..................	67.4	...	...	...	...	...
23.2 Communications, utilities and miscellaneous charges..............................	86.2	...	...	...	...	...
24.0 Printing and reproduction..................	174.9	...	49.0	46.8	50.2	+3.4
25.0 Other services.............................	173,204.7	195,941.1	224,051.1	214,713.4	207,391.8	-7,321.6
26.0 Supplies and materials.....................	9.3	...	29.4	28.1	30.1	+2.0
31.0 Equipment..................................	8.1	...	19.6	18.7	20.1	+1.4
41.0 Grants, subsidies, and contributions......	341,717.3	309,704.5	361,375.2	345,880.3	284,942.1	-60,938.2
42.0 Insurance claims and indemnities..........	2,545.0	...	...	...	...	...
Total obligations....................	$517,985.3	$505,910.9	$585,784.0	$560,947.0	$492,699.9	-$68,247.1

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Travel and transportation of persons............	$172.4	$265.0	$259.7	$259.7	$265.6	
The increase in the 1987 request reflects travel in support of the Drinking Water UIC program in non-primacy states..................						+$5.9

There is no change in the 1986 estimate.

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Transportation of things........................	$67.4	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						
Communications, utilities and miscellaneous charges..	$86.2	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						
Printing and reproduction.......................	$174.9	...	$49.0	$46.8	$50.2	
The increase in the 1987 request reflects use of carryover funds for the Asbestos-in-schools program..................................						+$3.4
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$2.2		
Other services..................................	$173,204.7	$195,941.1	$224,051.1	$214,713.4	$207,391.8	
The decrease in other services in the 1987 request primarily reflects reduced contract levels as a result of the government-wide commitment to deficit reduction.................						-$7,321.6
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$9,337.7		
Supplies and materials..........................	$9.3	...	$29.4	$28.1	$30.1	
The increase in the 1987 request reflects use of carryover funds for the Asbestos-in-schools program..................................						+$2.0
The decrease in the 1986 current estimate from the enacted represents the reduction mandated by the Balanced Budget Act.............				-$1.3		

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Equipment	$8.1	...	$19.6	$18.7	$20.1	
The increase in the 1987 request reflects use of carryover funds for the Asbestos-in-schools program						+$1.4
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act				-$0.9		
Grants, subsidies, and contributions	$341,717.3	$309,704.5	$361,375.2	$345,880.3	$284,942.1	
The decrease in the 1987 request reflects the government-wide commitment to deficit reduction						-$60,938.2
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act				-$15,494.9		
Insurance claims and idemnities	$2,545.0	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

SALARIES AND EXPENSES

OBJECT CLASSES	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Personnel Services	$430,082.2	$455,253.9	$464,397.9	$444,429.2	$458,257.4	+$13,828.2
Other Objects:						
21.0 Travel and transportation of persons	15,663.3	17,284.5	18,028.3	18,028.3	18,420.8	+392.5
22.0 Transportation of things	2,272.6	2,034.9	2,360.1	2,258.9	2,348.4	+89.5
23.1 Standard level user charges	29,106.6	34,464.4	33,618.0	33,618.0	35,374.5	+1,756.5
23.2 Rental payments to others	7,074.6	8,362.5	8,362.5	8,362.5	9,521.0	+1,158.5
23.3 Communications, utilities, and miscellaneous charges	31,163.8	34,155.3	35,079.1	31,766.1	33,723.8	+1,957.7
24.0 Printing and reproduction	4,747.0	5,451.1	5,703.1	5,457.8	5,920.4	+462.6
25.0 Other services	86,394.5	86,865.9	90,734.6	86,051.9	92,100.5	+6,048.6
26.0 Supplies and materials	13,028.2	11,720.1	11,836.6	11,327.7	11,924.7	+597.0
31.0 Equipment	36,787.2	14,523.4	13,581.8	12,995.8	19,448.6	+6,452.8
32.0 Lands and structures	108.7	...	...	...	...	...
41.0 Grants, subsidies, and contributions	2,528.8	295.6	329.0	314.8	906.9	+592.1
42.0 Insurance claims and indemnities	28.1	4.4	...	...	...	...
Total other objects	228,903.4	215,162.1	219,633.1	210,181.8	229,689.6	+19,507.8
Total obligations	$658,985.6	$670,416.0	$684,031.0	$654,611.0	$687,947.0	+$33,336.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Personnel services	$430,082.2	$455,253.9	$464,397.9	$444,429.2	$458,257.4	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels						+$13,828.2

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1986	Increase + Decrease - 1986 vs 1985
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$19,968.7		
Travel and transportation of persons............	$15,663.3	$17,284.5	$18,028.3	$18,028.3	$18,420.8	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels.........................						+$392.5
There is no change in the 1986 estimate.						
Transportation of things.......................	$2,272.6	$2,034.9	$2,360.1	$2,258.9	$2,348.4	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels.........................						+$89.5
The decrease in the 1986 current estimate from the enacted represents the reduction mandated by the Balanced Budget Act............				-$101.2		
Standard level user charges.....................	$29,106.6	$34,464.4	$33,618.0	$33,618.0	$35,374.5	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels.........................						+$1,756.5
There is no change in the 1986 estimate.						
Rental payments to others......................	$7,074.6	$8,362.5	$8,362.5	$8,362.5	$9,521.0	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels.........................						+$1,158.5
There is no change in the 1986 estimate.						

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Communications, utilities, and miscellaneous charges	$31,163.8	$34,155.3	$35,079.1	$31,766.1	$33,723.8	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels						+$1,957.7
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act				-$3,313.0		
Printing and reproduction	$4,747.0	$5,451.1	$5,703.1	$5,457.8	$5,920.4	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels						+$462.6
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act				-$245.3		
Other services	$86,394.5	$86,865.9	$90,734.6	$86,051.9	$92,100.5	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels						+$6,048.6
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Falanced Budget Act				-$4,682.7		
Supplies and materials	$13,028.2	$11,720.1	$11,836.6	$11,327.7	$11,924.7	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels						+$597.0
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act				-$508.9		

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Equipment....................................	$36,787.2	$14,523.4	$13,581.8	$12,995.8	$19,448.6	
The increase in the 1987 reqeust is necessary to continue Agency activities at current on-board levels........................						+$6,452.8
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$586.0		
Lands and structures...........................	$108.7	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						
Grants, subsidies, and contributions............	$2,528.8	$295.6	$329.0	$314.8	$906.9	
The increase in the 1987 request is necessary to continue Agency activities at current on-board levels........................						+$592.1
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$14.2		
Insurance Claims and Indemnities................	$28.1	$4.4	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

BUILDINGS AND FACILITIES

OBJECT CLASSES	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
21.0 Travel and transportation of persons......	$54.1	$100.0	$100.0	$100.0	$100.0	...
25.0 Other services............................	4,271.4	4,915.0	4,648.0	4,450.0	7,100.0	+2,650.0
32.0 Lands and structures......................	902.6	5,175.0	400.0	383.0	400.0	+17.0
Total obligations....................	$5,228.1	$10,190.0	$5,148.0	$4,933.0	$7,600.0	+$2,667.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1986 vs 1987
Travel and transportation of persons............	$54.1	$100.0	$100.0	$100.0	$100.0	
There is no change in the 1986 or 1987 estimate.						
Other services..................................	$4,271.4	$4,915.0	$4,648.0	$4,450.0	$7,100.0	
The increase in the 1987 estimate reflects the contractual support necessary for the con struction of the radiation laboratory in Montgomergy, Alabama................................						+$2,650.0

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1986 vs 1985
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$194.0		
Lands and structures............................	$902.6	$5,175.0	$400.0	$383.0	$400.0	
The increase in the 1987 obligation estimate is primarily for construction of a modern and safe radiation laboratory in Montgomery, Alabama............................						+$17.0
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$17.0		

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

HAZARDOUS SUBSTANCE RESPONSE TRUST FUND

OBJECT CLASSES	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Personnel Services	$58,099.9	$73,079.8	$71,499.0	$67,132.9	$71,696.0	+$4,563.1
Other Objects:						
21.0 Travel and transportation of persons	5,049.2	8,101.2	8,643.0	8,643.0	8,424.0	-219.0
22.0 Transportation of things	327.7	656.4	792.0	717.7	765.0	+47.3
23.1 Standard level user charges	3,564.2	5,194.0	6,040.0	6,040.0	6,052.0	+12.0
23.2 Rental payments to others	867.2	...	1,812.0	1,812.0	1,945.0	+133.0
23.3 Communications, utilities, and miscellaneous charges	3,462.8	4,393.7	3,000.0	1,336.4	3,000.0	+1,663.6
24.0 Printing and reproduction	377.5	890.7	992.0	902.5	962.0	+59.5
25.0 Other services	335,110.1	558,046.3	621,777.0	525,590.1	760,211.0	+234,620.9
26.0 Supplies and materials	2,242.3	4,959.7	5,609.0	5,096.4	5,432.0	+335.6
31.0 Equipment	7,634.8	7,857.2	9,796.0	8,888.1	9,473.0	+584.9
32.0 Land and structures	5.0	...	...	...	...	...
41.0 Grants, subsidies, and contributions	63,662.3	236,821.0	152,040.0	217,140.9	384,040.0	+166,899.1
42.0 Insurance Claims and Indemnities	2.2	...	...	...	...	...
Total other objects	422,305.3	826,920.2	810,501.0	776,167.1	1,180,304.0	+404,136.9
Total obligations	$480,405.2	$900,000.0	$882,000.0	$843,300.0	$1,252,000.0	+$408,700.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Personnel Services	$58,099.9	$73,079.8	$71,499.0	$67,132.9	$71,696.0	
The increase in the 1987 request is necessary to continue Agency activities at current levels						+$4,563.1

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$4,366.1		
Travel and transportation of persons............	$5,049.2	$8,101.2	$8,643.0	$8,643.0	$8,424.0	
The decrease in travel in the 1987 request will support the expected level of activity for this program..................................						-$219.0
There is no change in the 1986 estimate.						
Transportation of things........................	$327.7	$656.4	$792.0	$717.7	$765.0	
The increase in the 1987 request will support the expected level of activity for this program......................................						+$47.3
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act............				-$74.3		
Standard level user charges.....................	$3,564.2	$5,194.0	$6,040.0	$6,040.0	$6,052.0	
The increase in the 1987 request will support the expected level of activity for this program......................................						+$12.0
There is no change in the 1986 estimate.						
Rental payments to others......................	$867.2	...	$[illegible],812.0	$1,812.0	$1,945.0	
The increase in the 1987 request reflects the expected level of activity for this program.						+$133.0
There is no change in the 1986 estimate.						

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
Communications, utilities and miscellaneous charges.	$3,462.8	$4,393.7	$3,000.0	$1,336.4	$3,000.0	
The increase in the 1987 request reflects the expected level of activity for this program.						+$1,663.6
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$1,663.6		
Printing and reproduction......................	$377.5	$890.7	$992.0	$902.5	$962.0	
The increase in the 1987 request reflects the expected level of activity for this program.						+$59.5
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$89.5		
Other services................................	$335,110.1	$558,046.3	$621,777.0	$525,590.1	$760,211.0	
The increase in contracts in 1987 reflects the expected level of activity for this program.						+$234,620.9
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$96,186.9		
Supplies and materials.........................	$2,242.3	$4,959.7	$5,609.0	$5,096.4	$5,432.0	
The increase in the 1987 request reflects the expected level of activity for this.program.						+$335.6
The decrease in the 1987 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act.............				-$512.6		
Equipment.....................................	$7,634.8	$7,857.2	$9,796.0	$8,888.1	$9,473.0	
The increase in the 1987 request reflects the expected level of activity for this program						+$584.9

	Actual 1985	Budget Estimate 1986	Enacted 1986	Current Estimate 1986	Estimate 1987	Increase + Decrease - 1987 vs 1986
The decrease in the 1986 current estimate from the enacted represents the reductions mandated by the Balanced Budget Act				-$907.9		
Lands and structures	$5.0	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						
Grants, subsidies, and contributions	$63,662.3	$236,821.0	$152,040.0	$217,140.9	$384,040.0	
The increase in the 1987 request reflects the expected level of activity for this program.						+$166,899.1
The increase in the 1986 current estimate reflects expected increased state participation in response actions				+$65,100.9		
Insurance Claims and Indemnitities	$2.2	...	...	...	...	...
There is no request in the 1987 estimate and no change in the 1986 estimate.						

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